



**STATE OF TENNESSEE  
DEPARTMENT OF FINANCE AND ADMINISTRATION**

**REQUEST FOR PROPOSALS  
FOR  
PREMISE WIRING, EQUIPMENT INSTALLATION,  
AND  
CONFIGURATION SERVICES**



**SBC Number 529/000-06-03  
October 15, 2003**

## **CONTENTS**

<b>Section 1</b>	<b>Introduction</b>
<b>Section 2</b>	<b>RFP Schedule of Events</b>
<b>Section 3</b>	<b>General Requirements and Information</b>
<b>Section 4</b>	<b>Special Requirements</b>
<b>Section 5</b>	<b>Proposal Format and Content</b>
<b>Section 6</b>	<b>Evaluation and Contract Award</b>
<b>Section 7</b>	<b>Standard Contract Information</b>
<b>Section 8</b>	<b><i>Pro Forma</i> Contract and Contract Attachments</b>
<b>Attachments:</b>	<b>9.1 Certification of Compliance</b>
	<b>9.2 Cost Proposal Format</b>
	<b>9.3 Technical Proposal Evaluation Format</b>
	<b>9.4 Cost Proposal Evaluation Format</b>
	<b>9.5 Proposal Score Summary Matrix</b>
	<b>9.6 Sample Evaluation Notice</b>
	<b>9.7 Proposal Package Cover Attachment</b>

---

## 1 INTRODUCTION

---

### 1.1 Statement of Purpose

The purpose of this Request for Proposals (RFP) is to define the State's minimum requirements, solicit proposals, and gain adequate information by which the State may evaluate the services offered by Proposers.

The State of Tennessee, Department of Finance and Administration, Division of Capital Projects Management, hereinafter referred to as the State, intends to secure a contract for Premise Wiring, Equipment Installation and Configuration (when applicable) Services.

The contract resulting from this RFP shall require Premise Wiring Services for installation and maintenance of the communications wiring infrastructure within State of Tennessee facilities, including building and campus wiring, from the demarcation point to the user outlets. The contract also will contain requirements for equipment installations and possible configurations (for example: telephones for State prisons and data cabinets).

- 1.1.1 The Contractor shall be the statewide source of supply for premise wiring installations and additions and certain equipment installations. This will include: design, materials, installation labor, project management, documentation (including as-built), testing, and maintenance.

The intent is to normally use this source of supply for premise wiring projects. But, on any particular application, the State may choose to issue another RFP and allow other vendors, including the Contractor, to submit proposals.

- 1.1.2 The premise wiring systems provided under this Contract must be the Certified AVAYA SYSTIMAX wiring plan, which conforms to the international wiring standard TIA/EIA-568, BICSI TDM standards, provides certification for each installation, and gives the State a twenty (20) year warranty on all parts, labor and performance if any component of the system fails or the installation is deficient.

- 1.1.2.a. Proposers are not required to be AVAYA SYSTIMAX certified at the time of proposal submittal. However, the apparent best-evaluated Proposer must be certified by the contract start date specified in Section 1.3 of this RFP.

- 1.1.2.b. The responsibility of obtaining AVAYA SYSTIMAX certification resides solely with the vendor; the State will not intercede on the part of the vendor to obtain this certification.

- 1.1.3 While most State of Tennessee agencies anticipate expanding needs for premise wiring upgrades and new installations, there is no way to predict the number or scale of projects which will require these services. This RFP makes no guarantees, either stated or implied, about the demand for Services requested within.

### 1.2 Scope of Service

Section A of the *pro forma* contract, included in Section 8 of this RFP, details the scope of services and deliverables that the State requires.

The *pro forma* Contract also includes the terms and conditions required by the State.

### **1.3 Contract Duration**

The initial term of the contract resulting from this RFP is three (3) years. Prices quoted in response to this RFP will remain fixed for the entirety of the initial 3-year term. If the State exercises the option to extend the contract for an additional period of time, the prices will change in accordance with the Consumer Price Index (CPI), as described in RFP Section 8, *pro forma* Contract, Section C.6.

The State reserves the right to extend this Contract for an additional period or periods of time representing increments of no more than one year and a total contract term of no more than five (5) years, provided that the State notifies the Contractor in writing of its intention to do so at least thirty (30) days prior to the contract expiration date. An extension of the term of this Contract will be effected through an amendment to the Contract. If the extension of the Contract necessitates additional funding beyond that which was included in the original Contract, the increase in the State's maximum liability will also be effected through an amendment to the Contract and shall be based upon rates provided for in the original contract and proposal.

### **1.4 Contract Bond Requirement**

The State shall require the successful Proposer to provide a Contract Bond (a performance and payment bond) with any signed contract resulting from this RFP. A Contract Bond shall be in the form exhibited in the Proposal Documents (Section 8.2, Contract Attachment B).

1.4.1 Provisions for executing the Contract Bond are described in the *pro forma* Contract, Section E.5.

1.4.2 The Proposer as Contractor shall be required to furnish a Contract Bond for Two Million Dollars (\$2,000,000.00) to secure the faithful performance of the contract. The bond shall be attached to the signed Contract at time of submission to the State by the successful Proposer as Contractor.

1.4.3 No substitutions for the required bond will be allowed. The bond shall be written by a surety company licensed to transact business in Tennessee. The bond shall be in the form prescribed by the State and must be executed on behalf of the surety by an attorney-in-fact who shall attach power-of-attorney to the bond. The bond shall be signed by a licensed resident agent pursuant to T.C.A. 56-15-108. [State Building Commission meeting Minutes 11/10/87, 7/21/97 and 2/12/98]

### **1.5 Contractor Licensure**

Appropriate Tennessee Contractor License(s) are required, and demonstration of current licensure is a mandatory part of the Proposal submission (see RFP Section 5.2.2.5).

Proposers shall be familiar with the contractors licensing Act of 1976, as currently amended (codified in Tennessee Code Annotated Sections 62-6-101, et seq.) A Proposal will not be admitted for any Proposer who's Proposal is in conflict with state licensing law. Also see RFP Sections 3.5 and 3.6, and *pro forma* Contract Section A.3.a.

*(Proposers should verify that The Board for Licensing Contractors has current and correct licensure information on file. For inquiries contact:)*

Carolyn Lazenby  
Board for Licensing Contractors  
500 James Robinson Parkway, Suite 110  
Nashville, TN 37243  
(615) 592-3990 or 1-800-544-7693

## 1.6 Sales Tax Obligation

The Department of Finance and Administration administers contracts for services rather than commodities. When a contractor purchases materials for use in providing services under a Finance and Administration contract, those purchases are not exempt from sales tax, even if the materials will become attached to or incorporated into real property owned by the State. Therefore, in order to seek reimbursement for sales taxes, the Contractor must include those taxes in its offered cost or bid.

## 1.7 Letter of Intent to Propose

A letter indicating a vendor's intent to respond to this RFP with a proposal should be sent to the RFP Coordinator (refer to Section 3.1) no later than the *Letter of Intent to Propose* deadline date detailed in the Section 2, RFP Schedule of Events. *Letters of Intent to Propose* may be delivered by facsimile transmission. Vendors may withdraw their *Letters of Intent to Propose* at any time before the deadline for submitting a proposal.

The following information should be included in the *Letter of Intent to Propose*:

- Vendor Name
- Name and Title of Vendor Main Contact
- Address, Telephone Number, and Facsimile Number of Vendor Main Contact
- Signed Statement of Intent to Propose

Submittal of a *Letter of Intent to Propose*, by the specified deadline, is not a prerequisite for submitting a proposal, but it is necessary to ensure a vendor's receipt of RFP amendments and other communications regarding the RFP.

## 1.8 Proposal Deadline

Proposals shall be submitted no later than the Proposal Deadline time and date detailed in the Section 2, RFP Schedule of Events. Proposers shall respond to the written RFP and any exhibits, attachments, or amendments. A Proposer's failure to submit a proposal as required before the deadline shall cause the proposal to be disqualified.

Proposers assume the risk of the method of dispatch chosen. The State assumes no responsibility for delays caused by any delivery service. Postmarking by the due date shall not substitute for actual proposal receipt by the State. Late proposals shall not be accepted nor shall additional time be granted to any potential Proposer.

Proposals may not be delivered orally, by facsimile transmission, or by other telecommunication or electronic means.

## 1.9 Nondiscrimination

No person shall be excluded from participation in, be denied benefits of, be discriminated against in the admission or access to, or be discriminated against in treatment or employment in the State's contracted programs or activities on the grounds of disability, age, race, color, religion, sex, national origin, or any other classification protected by federal or Tennessee State Constitutional or statutory law; nor shall they be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of contracts with the State or in the employment practices of the State's contractors. Accordingly, all vendors entering into contracts with the State shall, upon request, be required to show proof of such nondiscrimination and to post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

The State has designated the following to coordinate compliance with the nondiscrimination requirements of the State of Tennessee, Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, and applicable federal regulations:

Buddy Lea, Director of Resource Development and Support  
12<sup>th</sup> fl. William R. Snodgrass Tennessee Tower  
312 8<sup>th</sup> Avenue North  
Nashville, TN 37243  
(615) 741-7662 telephone

**1.10 Assistance to Proposers With a Disability**

Proposers with a disability may receive accommodation regarding the means of communicating this RFP and participating in this procurement process. Proposers with a disability should contact the RFP Coordinator to request reasonable accommodation no later than the deadline for accommodation requests detailed in the Section 2, RFP Schedule of Events.

***-- Proceed to the next page --***

---

**2 RFP SCHEDULE OF EVENTS**

---

The following RFP Schedule of Events represents the State's best estimate of the schedule that shall be followed. Unless otherwise specified, the time of day for the following events shall be between 8:00 a.m. and 4:30 p.m., Central Time.

The State reserves the right, at its sole discretion, to adjust this schedule as it deems necessary. Notification of any adjustment to the Schedule of Events shall be provided to all vendors that submitted a *Letter of Intent to Propose*.

	EVENT	DATE	TIME
1	State Issues RFP	October 15, 2003	
2	Deadline for Proposers with a Disability to Make Accommodation Requests	October 22, 2003	
3	Deadline for <i>Letter of Intent to Propose</i>	October 29, 2003	
4	Deadline for Written Comments or Clarification Requests	November 5, 2003	
5	State Issues Responses to Written Comments	November 13, 2003	
6	Deadline for Submitting a Proposal <u>and</u> State Opens Technical Proposals	December 3, 2003	2:00 PM
7	State Completes Technical Evaluations	December 17, 2003	
8	State Opens Cost Proposal	December 18, 2003	9:00 AM
9	State Completes Cost Evaluations	December 21, 2003	
10	State Building Commission Review / Action	January 8, 2004	
11	State Sends a written Evaluation Notice to Proposers <u>and</u> State Opens RFP Files for Public Inspection	January 13, 2004	9:00 AM
12	Conclusion of Contract Signing	April 1, 2004	
13	Anticipated Contract Start Date	May 1, 2004	

---

## 3 GENERAL REQUIREMENTS AND INFORMATION

---

### 3.1 RFP Coordinator

The following RFP Coordinator shall be the main point of contact for this RFP.

Richard Marr  
Department of Finance and Administration  
Suite 2200, Wm. R. Snodgrass Tennessee Tower  
312 8<sup>th</sup> Avenue North  
Nashville, TN 37243-1510  
(615) 741-3286 telephone  
(615) 741-7599 FAX  
[Richard.Marr@state.tn.us](mailto:Richard.Marr@state.tn.us)

### 3.2 RFP Number

The State has assigned the following RFP identification number -- it should be referenced in all communications regarding this RFP. The RFP has been issued under the auspices of The State Building Commission (SBC). The State's official project number designating this RFP is as follows:

**SBC NO. 529/000-06-03**

### 3.3 Communications Regarding the RFP

- 3.3.1 Upon release of this RFP, all vendor communications concerning this procurement must be directed to the RFP Coordinator. Unauthorized contact regarding the RFP with other State employees of the procuring State agency may result in disqualification.
- 3.3.2 All communications should be in writing to the RFP Coordinator. Any oral communications shall be considered unofficial and nonbinding on the State. Written Comments, including questions and requests for clarification, must cite the subject RFP number. The RFP Coordinator must receive these written requests by the deadline specified in the RFP Schedule of Events.
- 3.3.3 Any communication regarding this RFP sent by facsimile transmission must also be sent by United States mail on the same date.
- 3.3.4 The State shall respond in writing to written communications. Such response shall constitute an amendment to the RFP. Only written responses to written communications shall be considered official and binding upon the State. The State reserves the right, at its sole discretion, to determine appropriate and adequate responses to written comments, questions, and requests for clarification.
- 3.3.5 The State shall mail copies of its written responses to written comments, to all vendors submitting a *Letter of Intent to Propose*.
- 3.3.6 Any data or factual information provided by the State shall be deemed for informational purposes only, and if a Proposer relies on said factual information it should either:
  - a) independently verify the information; or
  - b) obtain the State's written consent to rely thereon.



### 3.4 Required Review and Waiver of Objections by Proposers

Proposers should carefully review this RFP and all attachments, including but not limited to the *pro forma* contract, for comments, questions, defects, objections, or any other matter requiring clarification or correction (collectively called “comments”). Comments concerning RFP objections must be made in writing and received by the State no later than the Deadline for Written Comments detailed in the Section 2, RFP Schedule of Events. This will allow issuance of any necessary amendments and help prevent the opening of defective proposals upon which contract award could not be made.

Protests based on any objection shall be considered waived and invalid if these comments/objections have not been brought to the attention of the State, in writing, by the Deadline for Written Comments.

### 3.5 Licensure

Before a contract pursuant to this RFP is signed, the Proposer as Contractor must hold all necessary, applicable business and professional licenses. The State may require any or all Proposers to submit evidence of proper licensure.

- 3.5.1 As the work performed under a Contract pursuant to this RFP includes installation as well as supply of materials, the Proposal submission constitutes a bid and Tennessee Contractor license(s) are required. These classifications are outlined in Rule 0680-1-.16 under Electrical Contracting and under Specialty.
- 3.5.2 The following license classifications are considered acceptable for Proposers to bid: E; E-D; E-F; E-G; E-J; CE; CE-D; CE-F; CE-G; CE-J; S-Telecommunications; S-Fiberoptic; or S-Low Voltage Computer Wiring.
- 3.5.3 Contractor License information must be clearly displayed on the Proposal submission package at the time of submittal, or the Proposal will not be accepted for evaluation. See RFP Section 3.6 following, and RFP Attachment 9.7

### 3.6 Proposal Submittal

- 3.6.1 Proposers shall respond to this RFP with a Technical Proposal and a Cost Proposal.  
No pricing information shall be included in the Technical Proposal. Inclusion of Cost Proposal amounts in the Technical Proposal shall make the proposal nonresponsive.
- 3.6.1.1 One (1) original and seven (7) copies of the Technical Proposal shall be submitted to the State in a sealed package and be clearly marked:  
**“Technical Proposal in Response to SBC NO. 529/000-06-03 -- Do Not Open”**
- 3.6.1.2 One (1) Cost Proposal shall be submitted to the State as a separate, sealed package and clearly marked:  
**“Cost Proposal in Response to SBC NO. 529/000-06-03 -- Do Not Open”**
- 3.6.1.3 If the separately sealed proposals, marked as required above, are enclosed in another container for mailing purposes, the outermost container must fully describe the contents of the package and must be clearly marked:  
**“Contains Separately Sealed Technical and Cost Proposals”**
- 3.6.2 Proposal package must include the **Proposal Package Cover Attachment**, RFP Attachment 9.7, Tennessee Contractor License Information. This information must be clearly displayed, affixed to the outside of the outermost container of the submitted Proposal Package.

- 3.6.3 All proposals must be submitted to the RFP Coordinator at the following address by the date and time identified as the Deadline for Submitting a Proposal in the RFP Schedule of Events.

Department of Finance and Administration  
Capital Projects Management  
Suite 2200  
Wm. R. Snodgrass Tennessee Tower  
312 8<sup>th</sup> Avenue North  
Nashville, TN 37243-1510

### **3.7 Proposal Preparation Costs**

The State shall not pay any costs associated with the preparation, submittal, or presentation of any proposal.

### **3.8 Proposal Withdrawal**

To withdraw a proposal, the vendor must submit a written request, signed by an authorized representative, to the RFP Coordinator. After withdrawing a previously submitted proposal, the vendor may submit another proposal at any time up to the deadline for submitting proposals.

### **3.9 Proposal Amendment**

The State shall not accept any amendments, revisions, or alterations to proposals after the deadline for proposal submittal unless such is formally requested, in writing, by the State.

### **3.10 Proposal Errors**

Proposers are liable for all errors or omissions contained in their proposals. Proposers shall not be allowed to alter proposal documents after the deadline for submitting a proposal.

### **3.11 Incorrect Proposal Information**

If the State determines that a Proposer has provided, for consideration in the evaluation process or contract negotiations, incorrect information which the Proposer knew or should have known was materially incorrect, that proposal shall be determined non-responsive, and the proposal shall be rejected.

### **3.12 Prohibition of Proposer Terms and Conditions**

A Proposer may **not** submit the Proposer's own contract terms and conditions in a response to this RFP. If a proposal contains such terms and conditions, the State, at its sole discretion, may determine the proposal to be a nonresponsive counteroffer, and the proposal may be rejected.

### **3.13 Assignment and Subcontracting**

- 3.13.1 The Contractor may not subcontract, transfer, or assign any portion of the contract without prior, written approval from the State. Each subcontractor must be approved in writing by the State. The substitution of one subcontractor for another may be made only at the discretion of the State and with prior, written approval from the State.

- 3.13.2 Notwithstanding the use of approved subcontractors, the Proposer, if awarded a contract under this RFP, shall be the prime contractor and shall be responsible for all work performed.

### **3.14 Right to Refuse Personnel**

The State reserves the right to refuse, at its sole discretion, any subcontractors or any personnel provided by the prime contractor or its subcontractors.

### **3.15 Proposal of Alternate Services**

Proposals of alternate services (*i.e.*, proposals that offer something different from that requested by the RFP) shall be considered nonresponsive and rejected.

### **3.16 Proposal of Additional Services**

If a Proposer indicates an offer of services in addition to those required by and described in this RFP, these additional services may be added to the contract before contract signing at the sole discretion of the State.

The cost for any such additional services must be incorporated into the required cost amount(s) provided in the Cost Proposal so that all proposals may be equitably evaluated. The Proposer shall **not** propose unrequested rates as separate, additional rates for additional services. (Refer to Section 5.3 of this RFP for Cost Proposal requirements.)

### **3.17 Independent Price Determination**

- 3.17.1 A proposal shall be disqualified and rejected by the State if the price in the proposal was not arrived at independently without collusion, consultation, communication, or agreement as to any matter relating to such prices with any other Proposer, a State employee, or any competitor.
- 3.17.2 The Proposer is prohibited from submitting more than one proposal. Submittal of more than one proposal shall result in the disqualification of the Proposer.
- 3.17.3 The Proposer is prohibited from submitting multiple proposals in a different form (*i.e.*, as a prime contractor and as a subcontractor to another prime contractor). Submittal of multiple proposals in a different form may result in the disqualification of all Proposers associated with a multiple proposal.
- 3.17.4 Should any such prohibited action detailed in Sections 3.17.1, 3.17.2, and 3.17.3 be detected any time during the term of the contract, such action shall be considered a material breach and grounds for contract termination.

### **3.18 Insurance**

The apparent successful Proposer may be required to provide proof of adequate worker's compensation and public liability insurance coverage before entering into a contract. Additionally, the State may, at its sole discretion, require the apparent successful Proposer to provide proof of adequate professional malpractice liability or other forms of insurance. Failure to provide evidence of such insurance coverage is a material breach and grounds for termination of the contract negotiations. Any insurance required by the State shall be in form and substance acceptable to the State.

A copy of the appropriate policy or a Certificate of Coverage fully listing all liability coverage shall verify all required insurance. Such insurance shall be maintained through the life of the contract. Renewal policies or Certificates of Coverage must be forwarded to the State within thirty (30) days upon issuance. Failure to maintain required insurance could be cause for cancellation of the Contract.

Professional Malpractice Liability: Minimum of \$1,000,000.00 Aggregate.

### **3.19 Conflict of Interest and Proposal Restrictions**

- 3.19.1 By submitting a proposal, the Proposer certifies that no amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Proposer in connection with the procurement under this RFP.

Notwithstanding this restriction, nothing in this RFP shall be construed to prohibit a State agency or other governmental entity from making a proposal, being considered for award, or being awarded a contract under this RFP.

- 3.19.2 State agencies shall not contract with an individual who is, or within the past six months has been, an employee of the State of Tennessee. An individual shall be deemed a State employee until such time as all salary, termination pay, and compensations representing annual or compensatory leave have been paid by the State. A contract with a company in which a controlling interest is held by a State employee shall be considered to be a contract with said individual and shall be prohibited.
- 3.19.3 Any individual, company, or other entity involved in assisting the State in the development, formulation, or drafting of this RFP or its scope of services shall be considered to have been given information that would afford an unfair advantage over other Proposers, and said individual, company, or other entity may not submit a proposal in response to this RFP.

### **3.20 RFP Amendment and Cancellation**

The State reserves the unilateral right to amend this RFP in writing at any time. The State also reserves the right to cancel or reissue the RFP at its sole discretion. If an amendment is issued it shall be provided to all vendors submitting a *Letter of Intent to Propose*. Proposers shall respond to the final written RFP and any exhibits, attachments, and amendments.

### **3.21 Right of Rejection**

- 3.21.1 The State reserves the right, at its sole discretion, to reject any and all proposals or to cancel this RFP in its entirety.
- 3.21.2 Any proposal received which does not meet the requirements of this RFP may be considered to be nonresponsive, and the proposal may be rejected. Proposers must comply with all of the terms of this RFP and all applicable State laws and regulations. The State may reject any proposal that does not comply with all of the terms, conditions, and performance requirements of this RFP.
- 3.21.3 Proposers may not restrict the rights of the State or otherwise qualify their proposals. If a Proposer does so, the State may determine the proposal to be a nonresponsive counteroffer, and the proposal may be rejected.
- 3.21.4 The State reserves the right, at its sole discretion, to waive variances in technical proposals provided such action is in the best interest of the State. Where the State waives minor variances in proposals, such waiver does not modify the RFP requirements or excuse the Proposer from full compliance with the RFP. Notwithstanding any minor variance, the State may hold any Proposer to strict compliance with the RFP.

### **3.22 Disqualification due to Prior Unsatisfactory Conduct or Performance**

- 3.22.1 Proposers shall assume the risk that any proposal is subject to disqualification as a result of prior unsatisfactory conduct or performance.

- 3.22.2 The State reserves the right to reject any proposal based upon prior unsatisfactory conduct or performance by the Proposer, or an affiliated contracting entity of the Proposer. For the purposes of this subsection, “affiliated contracting entity” includes any corporate predecessor of the proposing entity, a joint venture partner of the proposing entity, a joint proposer, or any entity owned, controlled, or managed by any person or entity which owns, controls, or manages a proposing entity.
- 3.22.3 The State shall have the sole discretion to determine what constitutes prior unsatisfactory conduct or performance which may include, but is not limited to the following:
- a) conviction of a criminal offense relating to obtaining a state or federal government contract
  - b) submitting to the State of Tennessee invoices or other demands for payment for goods or services not actually provided, or for goods and services materially different from what was actually provided, where the contractor knew or should have known that the goods and services claimed were either not provided or were materially different than what was actually provided.
  - c) submitting to the State of Tennessee, for consideration in a proposal evaluation process or a contract negotiation, incorrect information which the Proposer knew or should have known was materially incorrect.
  - d) filing a procurement protest under T.C.A. 12-4-109 which the Review Committee has found to be in violation of T.C.A. 12-4-109(a)(1)(E)(ii), or filing a bid protest under T.C.A. 12-3-214 which the Board of Standards has found to be in violation of T.C.A. 12-3-1-214(b).
  - e) refusal, within the past ten years and without good cause, to perform a contract or a portion of a contract with the State of Tennessee as required by the contract documents.
  - f) failure to perform or unsatisfactory performance of one or more contracts with the State of Tennessee within the past ten years. This includes, but is not limited to failure to correct defective work, products, or services, or otherwise remedy defective performance a required by such contracts.
- 3.22.4 A disqualified Proposer will receive written notice of such disqualification **after** the State completes proposal evaluations, issues the notice of award, and opens the procurement files for public inspection. This notice will contain a brief statement of the reasons for the disqualification. Any Proposer aggrieved by disqualification may seek relief under the protest provisions set forth in Tennessee Code Annotated 12-4-109.

### **3.23 Disclosure of Proposal Contents**

All proposals and other materials submitted in response to this RFP procurement process become the property of the State of Tennessee. Selection or rejection of a proposal does not affect this right. All proposal information, including detailed price and cost information, shall be held in confidence during the evaluation process. Upon the completion of the evaluation of proposals, indicated by public release of an Evaluation Notice, the proposals and associated materials shall be open for review by the public in accordance with **Tennessee Code Annotated**, Section 10-7-504(a)(7). By submitting a proposal, the Proposer acknowledges and accepts that the full contents of the proposal and associated documents shall become open to public inspection.

### **3.24 Severability**

If any provision of this RFP is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and, the rights and obligations of the State and Proposers shall be construed and enforced as if the RFP did not contain the particular provision held to be invalid.

***-- Proceed to the next page --***

---

## **4 SPECIAL REQUIREMENTS**

---

### **4.1 Joint Ventures and Partnering**

Proposals from joint ventures are acceptable. However, such proposal should be designed to minimize any administrative burden on the State as a result of the participation of multiple entities. Proposals from joint ventures shall clearly set forth the respective responsibilities and functions each principal to the joint venture would perform if awarded the contract. If submitting a proposal as a joint venture, the Proposer must submit a copy of the joint venture agreement(s) that identifies the principals involved as well as their rights and responsibilities regarding performance and payment. The proposal transmittal letter must be signed by all principals and include all required information. The Proposer must submit only one transmittal letter; do not submit a separate letter for each entity involved.

If the joint venture is awarded the contract, the State shall require, at a minimum, the following:

- 4.1.1 All principals to the joint venture must sign the contract with the State;
- 4.1.2 The joint venture must designate a single point of contact who shall have the authority to represent all principals in the joint venture;
- 4.1.3 The principals in the joint venture shall execute a single Contract Bond and if any of the principals defaults on the contract requirements, the State shall have the option of claiming up to the limit of the bond;
- 4.1.4 All principals to the joint venture shall be jointly and severally liable to the State for performance of the contract. Upon any default of a principal to the joint venture, the remaining principal(s) shall take all appropriate actions to ensure that services are uninterrupted and shall be responsible for complying with all contract requirements, at no additional cost to the State.

### **4.2 Location and Work Space**

The work under this RFP is to be performed at various locations within the State of Tennessee. Work performed on the State's premises shall be completed during the State's standard business hours, except when after hours work is deemed necessary by the State.

Within thirty (30) days of the contract begin date, the Contractor shall be required to have, at a minimum, an office and materials warehouse in each of the following three (3) regions: East Tennessee, West Tennessee, and Nashville. Such offices/warehouses must be staffed from 8:00 am until 4:30 pm local time, Monday through Friday, excluding State of Tennessee holidays, and must have at least one (1) telephone line with voice mail, one (1) FAX line and one computer with internet access to receive work orders through the states work order software program. The Contractor must also maintain at least one twenty-four hour telephone line for emergencies.

### **4.3 Contract Bond**

- 4.3.1 The State shall require the successful Proposer to provide a Contract Bond (*a performance and payment bond*) with any signed contract resulting from this RFP. A Contract Bond shall be in the form exhibited in the Proposal Documents (Section 8.2, Contract Attachment B).
- 4.3.2 Provisions for executing the Contract Bond are described in the *pro forma* Contract, Section E.5.

---

## 5 PROPOSAL FORMAT AND CONTENT

---

### 5.1 General Proposal Requirements

- 5.1.1 The State discourages lengthy and costly proposals. Proposals should be prepared simply and economically and provide a straightforward, concise description of the Proposer's capabilities to satisfy the requirements of this RFP. Emphasis should be on completeness and clarity of content.
- 5.1.2 Proposers must follow all formats and address all portions of the RFP set forth herein providing all information requested. Proposers may retype or duplicate any portion of this RFP for use in responding to the RFP, provided that the proposal clearly addresses all of the State's information requirements.
- 5.1.3 Proposers must respond to every subsection under the Technical Proposal and Cost Proposal sections below. Proposers must label each response to RFP requirements with the section and subsection numbers associated with the subject requirement in this RFP (e.g., the response to the third requirement of the Proposal Transmittal Letter would be labeled 5.2.1.3).

Failure to follow the specified format, to label the responses correctly, or to address all of the subsections may, at the State's sole discretion, result in the rejection of the Proposal.

Proposals must not contain extraneous information. All information presented in a Proposal must be relevant in response to a requirement of this RFP, must be clearly labeled, and, if not incorporated into the body of the Proposal itself, must be referenced to and from the appropriate place within the body of the Proposal. Any information not meeting these criteria shall be deemed extraneous and shall in no way contribute to the evaluation process.

- 5.1.4 Proposals shall be prepared on standard 8 1/2" x 11" paper. Foldouts containing charts, spreadsheets, and oversize exhibits are permissible. All responses, as well as any reference material presented, must be written in English. All monetary amounts must be detailed in United States currency. All proposal pages must be numbered.
- 5.1.5 Proposers shall divide their responses to this RFP into a Technical Proposal and a Cost Proposal and submit them in accordance with Section 3.6 of this RFP by the Deadline for Submitting a Proposal in the RFP Schedule of Events.

Cost Proposal and pricing information shall **not** be included in the Technical Proposal. Inclusion of Cost Proposal dollar amounts in the Technical Proposal shall make the proposal nonresponsive and the proposal shall be rejected.

### 5.2 Technical Proposal

The Technical Proposal shall be divided into the following sections:

Proposal Transmittal Letter;  
Mandatory Proposer Qualifications;  
General Proposer Qualifications and Experience;  
Technical Approach; and,  
Detailed Documentation of Proposer Financial Resources.

If a proposal fails to detail and address each of the requirements detailed herein, the State may determine the proposal to be nonresponsive and reject it.



- 5.2.1 Proposal Transmittal Letter. The Technical Proposal must provide a written transmittal and offer of the proposal in the form of a standard business letter. The Proposal Transmittal Letter shall reference and respond to the following subsections in sequence and attach corresponding documentation as required. Each proposal must meet the Proposal Transmittal Letter requirements and provide all required documentation. A Proposal Transmittal Letter is mandatory, and failure to provide the information as required may result in the proposal being considered nonresponsive and rejected.
- 5.2.1.1 The letter shall be signed by a company officer empowered to bind the proposing vendor to the provisions of this RFP and any contract awarded pursuant to it; if said individual is not the company president, the letter shall attach evidence showing the signatory's authority to bind the company.
- 5.2.1.2 The letter shall state that the proposal remains valid for at least one hundred and eighty (180) days subsequent to the date of the Cost Proposal opening and thereafter in accordance with any resulting contract between the Proposer and the State.
- 5.2.1.3 The letter shall provide the complete name and Social Security Number of the individual or the legal entity name and Federal Employer Identification Number of the firm making the proposal.
- 5.2.1.4 The letter shall provide the name, mailing address, telephone number, and E-mail address of the person the State should contact regarding the proposal.
- 5.2.1.5 The letter shall state whether the Proposer intends to use subcontractors — if so, clearly identify the names of the subcontractors along with complete mailing addresses and the scope and portions of the work the subcontractors shall perform.
- NOTE: The Contractor must obtain written approval from the State prior to the use of any subcontractors, in accordance with RFP Section 3.13.1 and pro forma contract Section D.5.
- However, a Proposer does not need prior written approval in order to name a subcontractor in its Proposal. Assuming a given vendor receives an award pursuant to this RFP, the vendor's Proposal, including any named subcontractors, is included by reference in the Contract executed between the State and the Contractor. The State's signature on this contract shall constitute approval of any subcontractors named in the Proposal. However, the State reserves the right, in accordance with RFP Section 3.13, to disapprove any subcontractor so named.
- 5.2.1.6 The letter shall state whether the Proposer or any individual who shall perform work under the contract has a possible conflict of interest (e.g., employment by the State of Tennessee) and, if so, the nature of that conflict. The State reserves the right to cancel an award if any interest disclosed from any source could either give the appearance of a conflict of interest or cause speculation as to the objectivity of the offeror. Such determination regarding any questions of conflict of interest shall be solely within the discretion of the State.
- 5.2.2 Mandatory Proposer Qualifications. Technical Proposals shall provide responses and documentation, as required, that indicate that the Proposer has met the Mandatory Proposer Qualifications requirements. Any Proposal which does not meet the mandatory requirements and provide all required documentation may be considered nonresponsive, and the proposal may be rejected.
- Technical Proposals shall provide the following information (referencing the subsections in sequence):
- 5.2.2.1 written confirmation that the Proposer shall comply with all of the provisions in this RFP and shall accept all terms and conditions set out in the *pro forma* contract in Section 8 of this RFP. (NOTE: If the Proposal fails to provide said confirmation without exception or qualification, the State, at its sole discretion, may determine the proposal to be a nonresponsive counteroffer, and the proposal may be rejected.)

- 5.2.2.2 written certification and assurance of the Proposer's compliance with:
- a) the laws of the State of Tennessee;
  - b) Title VI of the federal Civil Rights Act of 1964;
  - c) Title IX of the federal Education Amendments Act of 1972;
  - d) the Equal Employment Opportunity Act and the regulations issued thereunder by the federal government;
  - e) the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the federal government;
  - f) the condition that the submitted proposal was independently arrived at, without collusion, under penalty of perjury; and,
  - g) the condition that no amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Proposer in connection with the Procurement under this RFP.
- (Use Attachment 9.1, Certification of Compliance)
- 5.2.2.3 documentation of financial responsibility and stability; said documentation shall include:
- 5.2.2.3.1 a current written bank reference, in the form of a standard business letter, indicating that the Proposer's business relationship with the financial institution is in positive standing
  - 5.2.2.3.2 two current written, positive credit references, in the form of standard business letters, from vendors with which the Proposer has done business; in lieu of such, documentation of a positive credit rating determined by an accredited credit bureau within the last 6 months, and
  - 5.2.2.3.3 a copy of a valid certificate of insurance indicating liability insurance in the amount of at least one million dollars (\$1,000,000).
- 5.2.2.4 written confirmation that the Proposer will provide a Contract Bond in accordance with the requirements of the RFP.
- 5.2.2.5 written confirmation that the Proposer holds an appropriate and current Tennessee Contractor License. For reference also see RFP Attachment 9.7.
- 5.2.2.6 written confirmation that the Proposer is AVAYA SYSTIMAX certified or that the Proposer will be AVAYA SYSTIMAX certified as of the contract start date (Refer to RFP Section 2).
- 5.2.2.6.1 This written confirmation submitted **with** the Proposal documents in response to RFP Section 5.2.2.6 above may come either from AVAYA or from the Proposer.
  - 5.2.2.6.2 The apparent successful Proposer must provide written documentation from AVAYA to the State indicating positive AVAYA SYSTIMAX certification on or before the contract start date.
- 5.2.2.7 if Proposer is a joint venture as described in RFP Section 4.1, clearly state this is the case and provide the official joint venture name, member companies, and functions intended to be performed by each member company in the joint venture entity, and provide all information required by RFP Section 4.1.
- 5.2.3 General Proposer Qualifications and Experience. Technical Proposals shall provide the following information (referencing the subsections in sequence) to evidence the Proposer's experience in delivering services similar to those required by this RFP:
- 5.2.3.1 a brief, descriptive statement indicating the Proposer's credentials to deliver the services sought under this RFP;

- 5.2.3.2 a brief description of the Proposer's background and organizational history;
- 5.2.3.3 years in business;
- 5.2.3.4 years AVAYA SYSTIMAX certified. If not currently certified, describe plans for obtaining certification.
- 5.2.3.5 a brief statement of how long the Proposer has been performing the services required by this RFP;
- 5.2.3.6 location of offices; If the Proposer does not currently have, at a minimum, an office and materials warehouse in East Tennessee, West Tennessee, and Nashville, as required by RFP Section 4.2, the Proposer must describe its plans for establishing these facilities within the required timeframe.
- 5.2.3.7 a description of the Proposer organization's number of employees, longevity, client base;
- 5.2.3.8 whether there have been any mergers, acquisitions, or sales of the Proposer company within the last ten years (if so, an explanation providing relevant details);
- 5.2.3.9 form of business (*i.e.*, individual, sole proprietor, corporation, non-profit corporation, partnership, joint venture, limited liability company, *et cetera*);
- 5.2.3.10 a statement as to whether the Proposer or any of the Proposer's employees, agents, independent contractors, or subcontractors have been convicted of, pled guilty to, or pled *nolo contendere* to any felony; and if so, an explanation providing relevant details;
- 5.2.3.11 a statement as to whether there is any pending litigation against the Proposer; and if such litigation exists, attach an opinion of counsel as to whether the pending litigation will impair the Proposer's performance in a contract under this RFP;
- 5.2.3.12 a statement as to whether, in the last ten years, the Proposer has filed (or had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary, or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors; and if so, an explanation providing relevant details;
- 5.2.3.13 an organizational chart highlighting the key people who shall be assigned to accomplish the work required by this RFP and illustrating the lines of authority and designate the individual responsible for the completion of each service component and deliverable of the RFP;
- 5.2.3.14 a narrative description of the proposed project team, its members, and organizational structure;
- 5.2.3.15 a personnel roster and resumes of key people who shall be assigned by the Proposer to perform duties or services under the contract (include estimated number of hours to be worked on the contract for each person, and the resumes shall detail each individual's title, education, current position with the Proposer, and employment history);
- 5.2.3.16 customer references for similar projects representing both three of the larger accounts currently serviced by the vendor and three completed projects— each reference must include:
  - a) the company name and business address;
  - b) the name, title, telephone number, fax number, and email address (if available) of the company contact knowledgeable about the project work; and
  - c) a brief description of the service provided and the period of service.

5.2.3.17 a list, if any, of all current contractual relationships with the State of Tennessee and all those completed within the previous five-year period— the list must include:

- a) the contract number;
- b) the contract term;
- c) the procuring State agency for each reference; and,
- d) the State contact name and telephone number for each reference.

(NOTE: Current or prior contracts with the State are NOT a prerequisite to being awarded the maximum available points for the Proposer Qualifications and Experience category. The existence of such current or prior contractual relationships will not automatically result in the addition or deduction of evaluation points. Any such current or prior contractual relationships, like those detailed pursuant to Section 5.2.3.16., shall be generally considered in awarding Proposer Qualifications and Experience category points.)

5.2.4 Technical Approach. The Proposer shall describe the vendor's plans and approach for accomplishing the work requested. The information provided shall be in enough detail to enable the State to ascertain the Proposer's understanding of the effort to be accomplished and should outline the steps in the total service proposed. Technical Proposals shall provide the following narrative information (referencing the subsections in sequence) to evidence the suitability of the Proposer's technical approach to delivering the services sought under this RFP:

5.2.4.1 Proposers must provide a comprehensive narrative, captioned "**Project Understanding**," that illustrates the vendor's understanding of the State's requirements and project schedule. Proposer will acknowledge the following response times during normal working hours for Trouble Tickets ( averaged 173 / month for last 11 months):

- a) Emergency response timeframe in Memphis, Nashville, and Knoxville: 2 hours.
- b) Emergency response timeframe in all other areas of the State: 4 hours
- c) Routine response timeframe: 8 hours entire State

*Emergency* equates to a Priority-1 trouble ticket logged with the OIR Telecommunications Help desk. *Routine* equates to a Priority-2 or Priority-3 trouble ticket.

5.2.4.2 Proposers must provide a comprehensive narrative, captioned "**Project Approach**," that illustrates how the Proposer will complete the scope of services, accomplish required objectives, and meet the State's project schedule.

5.2.4.3 Proposers must provide a comprehensive narrative, captioned "**Project Management**," that illustrates how the Proposer will manage the project, ensure completion of the scope of services, and accomplish required objectives within the State's project schedule.

5.2.5 Detailed Documentation of Proposer Financial Resources. The Proposer must provide the following documentation of sufficient financial strength and resources to provide the scope of services as required.

5.2.5.1 The Proposer's most recent independent audited financial statements for a fiscal year ended within the last 36 months. Compiled or reviewed financial statements will not be accepted.

5.2.5.1.1 The audited financial statements must be:

- a) prepared with all monetary amounts detailed in United States currency;
- b) prepared under United States generally accepted accounting principles; and
- c) audited under United States generally accepted auditing standards.

- 5.2.5.1.2 The audited financial statements must include:
- a) the auditor's opinion letter;
  - b) financial statements; and
  - c) the notes to the financial statements.
- 5.2.5.2 Documentation disclosing the amount of cash flows from operating activities for the Proposer's most current operating period. Said documentation must indicate whether the cash flows are positive or negative, and, if the cash flows are negative for the most recent operating period, the documentation must include a detailed explanation of the factors contributing to the negative cash flows.
- 5.2.5.3 In lieu of the documentation required by Sections 5.2.5.1 and 5.2.5.2, the Proposer may substantiate financial strength and resources by submitting a letter of commitment for a general line of credit from a financial institution. The amount of the line of credit shall be in the amount of Five Hundred Thousand Dollars and No Cents (\$500,000.00). This letter of commitment for a line of credit from a financial institution must detail that the commitment is valid for the period of May 1, 2004 through April 30, 2007, and must be signed both by an authorized agent of the financial institution and by a company officer empowered to bind the proposing vendor to the provisions of this RFP as required in Section 5.2.1.1.
- 5.3 Cost Proposal**
- 5.3.1 The Cost Proposal shall be submitted to the State in a separate, sealed package from the Technical proposal.
- 5.3.2 The Cost Proposal required format is provided in RFP Attachment 9.2, and the Cost Proposal must be recorded on an exact duplicate thereof. The Proposer shall prepare the Cost Proposal in accordance with the "Cost Proposal Instructions/Requirements" stated in RFP Attachment 9.2.
- 5.3.3 The Cost Proposal shall specifically record the exact cost amounts, including labor, proposed in the appropriate space as required by Attachment 9.2. Said proposed cost shall incorporate all cost for the proposed scope of services for the total contract period.
- 5.3.4 The Cost Proposal shall record only the proposed cost as required, and shall not record any other rates, amounts, or information. It shall not record any text that could be construed as a qualification of the cost amounts proposed. If the Proposer fails to specify the Cost Proposal as required, the State shall determine the proposal to be nonresponsive and reject it.
- 5.3.5 The Proposer must sign and date the Cost Proposal.

***-- Proceed to the next page --***

**6.1 Proposal Evaluation Categories and Maximum Points**

The categories that shall be considered in the evaluation of proposals are Qualifications and Experience, Technical Approach, and Cost. The maximum points that shall be awarded for each of these categories are:

CATEGORIES	MAXIMUM POINTS POSSIBLE
General Proposer Qualifications and Experience	30
Technical Approach	35
Cost Proposal	35

**6.2 Proposal Evaluation Process**

6.2.1 The evaluation process is designed to award the procurement not necessarily to the Proposer of least cost, but rather to the Proposer with the best combination of attributes based upon the evaluation criteria. Therefore, proposals are evaluated against the evaluation criteria in this RFP and NOT against other proposals.

6.2.2 The RFP Coordinator shall manage the proposal evaluation process and maintain proposal evaluation records. A Proposal Evaluation Team made up of three or more State employees shall be responsible for evaluating proposals.

6.2.3 All proposals shall be reviewed by the RFP Coordinator to determine compliance with basic proposal requirements as specified in this RFP. If the RFP Coordinator determines that a proposal may be missing one or more such requirements, the Proposal Evaluation Team shall review the proposal to determine:

- a) if it meets requirements for further evaluation;
- b) if the State shall request clarification(s) or correction(s); or
- c) if the State shall determine the proposal nonresponsive and reject it.

6.2.4 J. Allen Staley, CPA, shall provide an analysis of each Proposer's detailed documentation of financial resources. The analysis may include where appropriate (but not be limited to) an examination of the Current Ratio, Quick or Acid Test Ratio; Cash Ratio, Gross Working Capital to Total Assets Ratio, and Debt to Worth Ratio. The analysis shall result in a clear, written determination provided to the RFP Coordinator regarding whether each Proposer's detailed documentation of financial resources indicated apparent financial strength, stability, and resources to provide the subject scope of services as required.

If a Proposer's detailed documentation of financial resources is not clearly determined to indicate apparent financial strength and resources to provide the subject scope of services as required, the Proposal Evaluation Team shall review the proposal to determine if the State shall:

- a) request clarification(s) or correction(s); or
- b) determine the proposal nonresponsive and reject it.

- 6.2.5 The Proposal Evaluation Team shall evaluate responsive proposals. Each evaluator shall score the General Proposer Qualifications and Experience section and the Technical Approach section of each proposal. The evaluation scoring shall use the pre-established evaluation criteria and weights set out in this RFP. Each evaluator shall use only whole numbers for scoring proposals. (Refer to Attachment 9.3, Technical Proposal Evaluation Format).
- 6.2.6 The State reserves the right, at its sole discretion, to request clarifications of technical proposals or to conduct discussions for the purpose of clarification with any or all Proposers. The purpose of any such discussions shall be to ensure full understanding of the proposal. Discussions shall be limited to specific sections of the proposal identified by the State and, if held, shall be after initial evaluation of Technical Proposals. If clarifications are made as a result of such discussion, the Proposer shall put such clarifications in writing.
- 6.2.7 Upon completion of Technical Proposal scoring by the Proposal Evaluation Team, the RFP Coordinator shall calculate the average Technical Proposal score for each proposal.
- 6.2.8 After opening the Cost Proposals, the RFP Coordinator shall calculate scores for each Cost Proposal. The Cost Evaluation score shall be based on the proposed cost for evaluation amount indicated by the Cost Proposal. The amount shall be used in the following formula to determine the points a Proposer shall receive for the Cost Proposal:

$$\frac{\text{lowest proposed cost for evaluation}}{\text{proposed cost for evaluation being evaluated}} \times \text{maximum cost points} = \text{SCORE of cost proposal being evaluated}$$

(Refer to Attachment 9.4, Cost Proposal Evaluation Format, for details.)

- 6.2.9 The RFP Coordinator shall combine the average Technical Evaluation scores with the Cost Evaluation scores for each Proposer. (Refer to Attachment 9.5, Proposal Score Summary Matrix).
- 6.2.10 All proposal evaluation calculations shall result in numbers rounded to the nearest two decimal places (e.g., 9.99).
- 6.3 Contract Award Process**
- 6.3.1 The RFP Coordinator shall forward results from the proposal evaluation process to the head of the procuring agency for consideration.
- 6.3.2 The State reserves the right to make an award without further discussion of any proposal submitted. There shall be no best and final offer procedure. Therefore, each proposal should be initially submitted on the most favorable terms the vendor can offer.
- 6.3.3 After the evaluation of proposals and final consideration of all pertinent information available, the head of the procuring agency shall issue a written Evaluation Notice to all Proposers. The notice shall identify the apparent best-evaluated Proposer. The notice shall not create rights, interests, or claims of entitlement in the apparent best-evaluated Proposer or any vendor. (Refer to Attachment 9.6 for a sample notice).
- 6.3.4 The RFP files shall be made available for public inspection.
- 6.3.5 The State reserves the right, at its sole discretion, to negotiate with the apparent best evaluated Proposer subsequent to the Evaluation Notice.

- 6.3.6 The apparent best-evaluated Proposer shall be prepared to enter into a contract with the State which shall be substantially the same as the *pro forma* contract included in Section 8 of this RFP. Notwithstanding, the State reserves the right to add terms and conditions, deemed to be in the best interest of the State, during final contract negotiations. Any such terms and conditions shall be within the scope of the RFP and shall not affect the basis of proposal evaluations.
- 6.3.7 If a Proposer fails to sign and return the contract drawn pursuant to this RFP and final contract negotiations within 14 days of its delivery to the Proposer, the State may determine, at its sole discretion, that the Proposer is nonresponsive to the terms of this RFP and reject the proposal.
- 6.3.8 If the State determines that the apparent best evaluated Proposer is nonresponsive and rejects the proposal after opening Cost Proposals, the RFP Coordinator shall re-calculate scores for each responsive Cost Proposal and award the Contract in accordance with the requirements of 6.2.8 *et seq.*, above.
- 6.3.9 Contract award shall be subject to the contract approval of all appropriate State officials in accordance with applicable State laws and regulations.

***-- Proceed to the next page --***



---

## 7 STANDARD CONTRACT INFORMATION

---

### 7.1 Contractor Registration

Contractor Registration is required of all State contractors. Proposers need not be registered with the State to make a proposal. However, all service providers with whom the State of Tennessee contracts must register through the Department of Finance and Administration *Service Provider Registry System* (SPRS) prior to contract approval. Any unregistered service provider must simply file a completed registration with the State prior to the final approval of a contract.

- 7.1.1 The SPRS is intended to foster the State's use of minority and small businesses and promote competition in service contracting. Through the system, State agencies will have access to ownership and service information about potential service providers. For more information, visit the SPRS Internet site at <http://www.state.tn.us/finance/rds/ocr/sprs.html> or direct questions about SPRS registration to:

Department of Finance and Administration  
Office of Contracts Review  
12th Floor, William R. Snodgrass Tennessee Tower  
Nashville, TN 37243-1700  
(615) 741-7662

- 7.1.2 This RFP details SPRS registration information only as a contract requirement notice. SPRS registrations should not be submitted with proposal materials. SPRS registration information will not be considered in the evaluation process pursuant to this RFP.
- 7.1.3 If a Proposer fails to register with the State as a service provider as required by the Department of Finance and Administration within 14 days of final contract negotiations, the State may determine, at its sole discretion, that the Proposer is nonresponsive to the terms of this RFP.

### 7.2 Contract Approval

The RFP and the contractor selection processes do not obligate the State and do not create rights, interests, or claims of entitlement in the apparent best evaluated Proposer or any vendor. Contract award and State obligations pursuant thereto shall commence only after the contract is signed by the Contractor and the head of the procuring State agency and after the contract is signed by all other State officials as required by State laws and regulations to establish a legally binding contract.

### 7.3 Contract Payments

- 7.3.1 Contract payments shall be made in accordance with the Payment Terms and Conditions provision of the final contract.
- 7.3.2 No payment shall be made until the contract is approved as required by State laws and regulations. Under no conditions shall the State be liable for payment of any type associated with the contract or responsible for any work done by the Contractor, even work done in good faith and even if the Contractor is orally directed to proceed with the delivery of services, if it occurs before the contract start date specified by the contract or before contract approval by State officials as required by applicable statutes and rules of the State of Tennessee.

#### **7.4 Contract Bond**

The successful Proposer shall provide Contract Bond in the amount of \$2,000,000.00. Refer to RFP Section 1.4 and Contract Attachment B. Bonds shall be provided in accordance with Section E.5 of the *pro forma* Contract.

#### **7.5 RFP and Proposal Incorporated into Final Contract**

This RFP and the successful proposal shall be incorporated into the final contract.

#### **7.6 Contract Monitoring**

The Contractor shall be responsible for the completion of all work set out in the contract. All work is subject to inspection, evaluation, and acceptance by the State. The State may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. At reasonable times, the State may inspect those areas of the Contractor's place of business that are related to the performance of the contract. If the State requires such an inspection, the Contractor shall provide reasonable access and assistance.

#### **7.7 Contract Amendment**

7.7.1 During the course of this contract, the State may request the Contractor to perform additional work for which the Contractor would be compensated. That work shall be within the general scope of this RFP. In such instances, the State shall provide the Contractor a written description of the additional work, and the Contractor shall submit a time schedule for accomplishing the additional work and a price for the additional work based on the rates included in the Contractor's Proposal to this RFP.

7.7.2 If the State and the Contractor reach an agreement regarding the work and associated compensation, said agreement shall become effective by means of a contract amendment. Any such amendment requiring additional work must be mutually agreed upon by the parties and signed by the Contractor and the head of the procuring State agency and must be approved by other State officials as required by State laws and regulations. The Contractor shall not commence additional work until the State has issued a written contract amendment and secured all required approvals.

***--Proceed to the next page --***

The *pro forma* contract (provided in the following pages) contains capitalized and bracketed items that shall be replaced with appropriate information in the final contract.

**CONTRACT  
BETWEEN THE STATE OF TENNESSEE,  
DEPARTMENT OF FINANCE AND ADMINISTRATION  
AND  
[CONTRACTOR NAME]**

This Contract, by and between the State of Tennessee, Department of Finance and Administration, hereinafter referred to as the "State" and **[CONTRACTOR LEGAL ENTITY NAME]**, hereinafter referred to as the "Contractor," is for the provision of premise wiring services, equipment installation, and configuration as further defined in the "SCOPE OF SERVICES."

The Contractor is **[AN INDIVIDUAL / A FOR-PROFIT CORPORATION / A NONPROFIT CORPORATION / A SPECIAL PURPOSE CORPORATION OR ASSOCIATION / A FRATERNAL OR PATRIOTIC ORGANIZATION / A PARTNERSHIP / A JOINT VENTURE / A LIMITED LIABILITY COMPANY]**. The Contractor's address is:

[ADDRESS]

The Contractor's place of incorporation or organization is **[STATE OF ORGANIZATION]**.

**A    SCOPE OF SERVICES:**

- A.1    Contractor Services:** The State requires a source of supply for the following services. These services define premise wiring services, equipment installation, and configuration for the purposes of this Contract. A specific project might utilize any possible combination of these services depending upon the requirements of that project.
- A.1.a    Provide Statewide premise wiring services to the State, including building wiring, campus wiring, and wireless applications, as well as equipment installation and configuration, including but not limited to telephones, and data cabinets, as required.
- A.1.b    Translate the State's needs into a comprehensive design document that includes detailed specifications and an implementation plan.
- A.1.c    Evaluate and recommend the optimum solution for each application.
- A.1.d    Provide project management resources during all phases of a project and utilize a project management methodology that will provide documentation such as, Gantt charts, PERT charts, status reports, and resource allocations.
- A.1.e    Provide all resources required by each project such as on-line as-built documentation services, testing, and system maintenance.
- A.1.f    Develop an overall quality assurance plan, to be approved by the State, as part of the project management planning and maintain the plan throughout the project. The plan will include:
- Objectives for the quality of the project's results.
  - Identification and definition of the processes critical to meeting the objectives.

- Definition of the methodology and criteria to evaluate the processes and their effectiveness in meeting the objectives.
  - Documentation of the objectives, processes, methodologies, criteria, and their relationships in a project quality assurance plan.
- A.1.g Implement processes identified as critical to meeting State identified objectives, monitor the performance throughout the duration of each project, and implement process improvements as needed.
- A.1.h Maintain a quality assurance plan throughout each project, as improvements in project work processes are identified and implemented.
- A.1.i Provide a quality control process for monitoring all projects. The Contractor must assure that project work products are complete, accurate, and free of technical defects. The Contractor must take steps to prevent the re-occurrence of any identified defects in work products.
- A.1.j Verify that work products accurately and completely represent the information used in their creation and that they conform to applicable State standards.
- A.1.k Certify to the State that deliverables for each project have passed the Contractor's quality controls when submitting them to the State for acceptance.
- A.1.l Participate with the State on Quality Assurance Assessments. Participation includes:
- Maintaining project quality records, including methodology, as specified in the quality assurance plan, and providing these to State as requested by the State.
  - Making other relevant Contractor-maintained project records available to State as requested by the State.
  - Making Contractor project staff available for interviews with State assessors.
  - Participating in meetings as required and scheduled by the State.
  - Taking agreed-upon actions identified as Contractor responsibilities for quality assurance.
- A.1.m Provide personnel for up to fifty (50) projects of varying size and scope concurrently in the State of Tennessee. Each project may have different task requirements.
- A.1.n Provide expertise in the following areas:
- 1) **Project Manager** – Management of premise wiring projects of all levels of complexity. Overall responsibility for coordination of Contractor activities to ensure successful on-time completion of every State project to the established standards. Management skills for multiple statewide projects are necessary.
  - 2) **System Designer / RCDD** - The primary responsibility for the technical aspects of the Contract. Must be a current BICSI certified RCDD (Registered Communications Distribution Designer), familiar in all aspects of any telecommunication wiring need for a structured premise wiring system. Answers to Contractor's CEO to ensure overall quality of work performed on State projects is to established standards. All project personnel, including the project managers, are monitored by this person. This person will place his/her official RCDD stamp of approval on all final drawings and documents and records management. Contract familiarity and working knowledge of the BICSI, SYSTIMAX®, TIA/EIA, IEEE, NEC, and any other standards deployed is required. One RCDD is required in each region of the following regions: East Tennessee, West Tennessee, and Nashville.
  - 3) **Technician (Copper Cable)** - Technical specialist with knowledge and work skills for installing primarily copper twisted pair and copper coaxial cabling to whatever standards are being implemented. Secondary knowledge and skills in other media is required. All copper cable technicians must be SYSTIMAX® Certified. Sixty-percent (60%) of all copper cable technicians must be BICSI Certified. The Contractor shall have one hundred twenty (120) days from the contract begin date to meet this BICSI certification requirement. Documentation must be

presented at three (3) month intervals, for the duration of the Contract, showing that this requirement is maintained.

- 4) **Technician (Fiber Optic Cable)** - Technical specialist with knowledge and work skills for installing primarily fiber optic cabling, both single mode and multimode, to whatever standards are being implemented. Secondary knowledge and skills in other media is required. The fiber optic cable technicians must be technical specialists with knowledge and work skills for installing to whatever standards are being implemented. Sixty-percent (60%) of all fiber optic cable technicians must be BICSI Certified. The Contractor shall have one hundred twenty (120) days from the contract begin date to meet this BICSI certification requirement. Documentation must subsequently be presented at three (3) month intervals, for the duration of the contract, showing that this requirement is maintained.
- 5) **As-Built Documenter** – The As-Built Documenter is responsible to create as-built and Cable Management System (CMS) records for new installations and to modify existing records for moves, adds, and changes from field information gathered by installation technicians. Records entry into a CMS system may be required.
- 6) **Wireless LAN Engineer** – The Wireless LAN Engineer is responsible for designing Wireless LAN systems and Certifying Installations.
- 7) **Maintenance & Service Technician for Wireless LAN** – The Maintenance and Service Technician for Wireless LAN is responsible for servicing and maintaining the Wireless LAN systems.
- 8) **Draftsperson** - CAD / AutoCAD Required
- 9) **Labor** – The Laborer shall provide general telecommunications labor services.
- 10) **Traffic Control** – The Contractor shall be required to provide traffic control services, as by Davidson County Codes.

A.2 **Installation Item Requirements:** The items listed in **Contract Attachment A** represent the installation items that will be required during this Contract, pending any new items added in accordance with Section E.13, new item list.

A.2.a The Contractor must follow the latest technical standards for premise wiring systems and associated practices as issued by the FCC, TIA/EIA, BICSI, IEEE, NEC, NEMA, UL, ANSI, ISO, NCTA, NFPA, and NTSC. All installations will follow BICSI/manufacture certification standards. Should there be a conflict, BICSI TDMM standards will be used.

A.2.b The Contractor shall follow the State Telecommunications Voice and Data Wiring Standards (Contract Attachment C) for all telecommunications installations within State facilities.

State Telecommunications Voice and Data Wiring Standards are updated from time to time in response to changes in technology, terminology, or other amendment deemed necessary by the State. Vendors, Contractors, and Installers are responsible to confirm the edition of wiring standards currently authorized by the State Office for Information Resources (OIR) prior to advancing any telecommunications wiring project.

A.2.c The Contractor shall provide a minimum twenty-year warranty for new installation and/or extensions to existing installations. This warranty must be backed by AVAYA and its Business Partners. Non-SYSTIMAX® work and materials must be warranted for a minimum of three (3) years from date of acceptance by the State. This warranty must be backed by the Contractor and must include a provision whereby the manufacturer or Value Added Reseller (VAR) must repair or replace, at its discretion, any component found defective during the warranty period, at no cost to the State.

A.2.d The Contractor will provide as-built documentation after acceptance by the State within thirty (30) days of completion. Minimum documentation includes:

- Complete floor plans with cable numbering to each workstation location and cable runs

- Frame/rack layout with cable numbering
  - OSP plans and drawings
  - Wireless LAN documentation
  - Complete test documentation for all testing
  - Any other documentation required in the statement of work
  - Soft (electronic) copy
- A.2.e Delivery of equipment and materials to job sites and storage of the equipment and materials is the sole responsibility of the Contractor. Storage space may be available; however, until acceptance and transfer of title, all risk of loss remains with the Contractor.
- A.2.f Only new materials or approved materials will be acceptable. Major materials not available through the manufacturer catalogs must be State approved. Minor incidental hardware and the like are considered part of any installation and must be Contractor supplied.
- A.2.g Hand printed or written identification labels will not be accepted. Labeling instructions are contained in the State Telecommunications Voice and Data Wiring Standards (Contract Attachment C).
- A.2.h The Contractor, at no additional cost to the State, will correct any violations of local, municipal, State, or federal codes governing the installation of telecommunications premise wiring systems.
- A.2.i Workmanship and neat appearance will be just as important as the electrical and mechanical integrity of any installation. Any installation deemed by the State to be deficient in neatness, appearance, or conforming to good workmanship, will be corrected by the Contractor at no additional cost to the State.
- A.2.j All station related cables, wires, and equipment must be firmly held in place. Fastenings and supports must be adequate to support loads with ample safety factors. It is unacceptable for cables and wires to be laying on ceiling tiles or other objects that are not part of the Premise Wiring System.
- A.2.k The Contractor must use only approved Category compliant fittings and products, as specified by the manufacturer.
- A.2.l The minimum bend radius for 4-pair cable is four times the outside diameter, for multi-pair copper and fiber is ten times the outside diameter. In any case, the Contractor may NOT exceed the manufacturer's specifications.
- A.2.m All cables shall be routed as to maintain the following minimum distances from power sources:
- 12 inches from power lines of 2KVA or less
  - 12 inches from high voltage lighting (including fluorescent)
  - 24 inches from power lines of >2KVA or <5KVA
  - 36 inches from power lines of >5KVA
  - 48 inches from transformers and electric motors.
- A.2.n Wherever necessary to pass through a firewall or between floors, all pathways shall be properly sleeved and fire stopped using Nelson Firestop LBC Sealant or FSP Firestop Putty or approved equivalent. Incomplete breaches of longer than eight (8) hours must be temporarily protected using Nelson PLW Firestop Pillow or approved equivalent.
- A.2.o The Contractor must notify the State of any unexpected or unsafe installation situations for direction before proceeding.
- A.2.p All testing must be offered for witnessing by the State. If the State is unavailable to witness testing, the Contractor must certify, by endorsement, test completion and passing by letter.
- A.2.q The maximum untwisting of cable pairs allowed shall not exceed manufacturer specifications.
- A.2.r Cable pulling tension should not exceed twenty-five (25) pounds on individual pairs, or manufacturer specifications, whichever is lower.
- A.2.s Field assembled patch cords are not acceptable for new, upgraded, or changed wiring situations. Factory manufactured and certified patch cords must always be used except as a temporary

measure in emergencies to restore disrupted service. All patch cords must be compatible with the type and manufacturer of cabling and jacks. Maximum patch cord length is fifteen (15) feet for workstations (WAO) and fifteen (15) feet within closets (TC).

- A.2.t Conduit fill should conform to NEC 2002 Chapter 9, and the TIA/EIA-569B, TR41 standard unless specifically approved by the State.

### A.3 **Contractor Licensure and Work Procedures**

- A.3.a The Contractor is responsible for all licenses, certifications, permits, etc. required for completion of the work as required by this Contract.

- 1) Tennessee Contractor license(s) will be required. The following contractor license classifications are considered acceptable: E; E-D; E-F; E-G; E-J; CE; CE-D; CE-F; CE-G; CE-J; S-Telecommunications; S-Fiberoptic; or S-Low Voltage Computer Wiring.
- 2) These classifications are outlined in Rule 0680-1-.16 under Electrical Contracting and under Specialty.

- A.3.b The Contractor must replace or restore (at least to the original condition) any damage to floor, ceiling, walls, furniture, landscape, etc. caused by its personnel and/or operations, at the Contractor's expense.

- A.3.c During site installation/construction, the Contractor must maintain a clean and safe working environment for not only Contractor staff, but also State workers and the public.

- 1) The Contractor must minimize disruptions to the State work force as much as possible
- 2) The Contractor must leave all work areas secured, safe, and clean after stopping for the day.

- A.3.d The Contractor must use the State's work order system to receive and update work orders. All work order direction MUST be in written form (electronic or paper), with the exception of stop work orders, which may be given verbally (followed by written notification). All work orders must be completed on time as defined by the 'due date' on the work order issued by the State.

### A.4 **State Responsibilities. The State shall:**

- A.4.a Provide Statement of Work Requirements to Contractor.
- A.4.b Review proposals and estimated work documents submitted in response to Statements of Work Requirements.
- A.4.c Manage this Contract and continually evaluate the Contract's effectiveness and quality.
- A.4.d Approve the Contractor quality assurance plan, as part of the project management planning, and maintain the plan throughout the Contract.
- A.4.e Periodically review quality control practices and recommend or require changes in those practices.
- A.4.f The State will evaluate project performance against the project quality assurance plan periodically and recommend process corrective action and improvements as needed.

In addition the State will:

- Perform periodic quality assurance assessments as scheduled in the quality assurance plan.
- Conduct assessment meetings, as needed, with all responsible parties to consider recommendations and determine resulting actions.
- Take agreed-upon actions identified as State responsibilities.

- A.4.g Pertaining to Project Management responsibilities, the State will:

- Determine the disposition, including priority, of all new installations, upgrades, and changes to building premise wiring systems.

- Periodically review management practices and recommend or require improvement in those practices as needed.

A.4.h The State is responsible for the following:

- Providing space for communications closets
- Providing electrical service for installed equipment, including utility outlets
- Providing HVAC for facilities as dictated by installed equipment
- Providing lighting for closet areas
- Providing security and protection of installed equipment.

A.4.i The State will issue all work orders in written form, electronically or paper, except for stop work orders that can be verbally issued by the State Project Manager (to be followed immediately by written direction).

A.4.j The State will perform routine inspections, in accordance with State policy, of the Contractor's work under this Contract.

## B CONTRACT TERM:

B.1 Contract Term. This Contract shall be effective for the period commencing on [Contract Start Date] and ending [Contract Completion Date.] The State shall have no obligation for services rendered by the Contractor, which are not performed within the specified period.

B.2 Term Extension. The State reserves the right to extend this Contract for an additional period or periods of time representing increments of no more than one year and a total contract term of no more than five (5) years, provided that the State notifies the Contractor in writing of its intention to do so at least thirty (30) days prior to the contract expiration date. An extension of the term of this Contract will be affected through an amendment to the Contract. If the extension of the Contract necessitates additional funding beyond that which was included in the original Contract, the increase in the State's maximum liability will also be affected through an amendment to the Contract and shall be based upon rates provided for in the original contract.

## C PAYMENT TERMS AND CONDITIONS:

C.1 Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed [WRITTEN DOLLAR AMOUNT] (\$[NUMBER AMOUNT]). The Service Rates in Section C.3 shall constitute the entire compensation due the Contractor for the Service and all of the Contractor's obligations hereunder regardless of the difficulty, materials or equipment required. The Service Rates include, but are not limited to, all applicable taxes, fees, overheads, and all other direct and indirect costs incurred or to be incurred by the Contractor.

The Contractor is not entitled to be paid the maximum liability for any period under the Contract or any extensions of the Contract for work not requested by the State. The maximum liability represents available funds for payment to the Contractor and does not guarantee payment of any such funds to the Contractor under this Contract unless the State requests work and the Contractor performs said work. In which case, the Contractor shall be paid in accordance with the Service Rates detailed in Section C.3. The State is under no obligation to request work from the Contractor in any specific dollar amounts or to request any work at all from the Contractor during any period of this Contract.

C.2 Compensation Firm. The Service Rates and the Maximum Liability of the State under this Contract are firm for the duration of the Contract and are not subject to escalation for any reason unless amended.



- C.3 Payment Methodology. The Contractor shall be compensated based on the Service Rates specified in Attachment A for units of service authorized by the State, in a total amount not to exceed the Contract Maximum Liability established in Section C.1. The Contractor's compensation shall be contingent upon the satisfactory completion of units of service or project milestones defined in Section A.
- C.3.a The Service Rates in Attachment A shall include, where necessary, the following: horizontal cable (estimated at 150' on average), jack assemblies, face plates, connectors, dust covers, designation strips, connecting blocks, demarcations, termination of all cables, ancillary items, labeling/tagging, testing, site visit(s), as-built drawings in a form and format as required by the State, and input to a CMS (Cable Management System). Ancillary items are defined as, but not limited to, the following: proper mounting hardware, bolts, screws, tywraps, and tape.
- The Service Rates further include, but are not limited to, all applicable taxes, fees, overheads, and all other direct and indirect costs incurred or to be incurred by the Contractor.
- C.3.b The Contractor shall submit invoices upon project completion, in a form and format as required by the State, with all of the necessary supporting documentation, prior to any payment. Paper invoices shall be required until the State implements an automated system. At that time, the State will require electronic invoices to be submitted on compact disk. The State will provide, to the Contractor, the form and format required for the electronic invoices.
- 1) All invoices must include, at a minimum, the following information: request for service number, contract number, contract line number, item description, quantity being invoiced, contract unit price, extended unit price, and total invoiced amount.
  - 2) In addition, normal orders will include: as-builts, cable lengths and cable test results, and labor time sheets for labor hours. In some cases the State may require submission of additional documentation based on particular orders, as determined by the State.
- C.4 Service Rates. Except where specifically stated otherwise, the Service Rates in *Contract Attachment A* shall include installation and labor. However, the Contractor shall be reimbursed on an hourly rate basis (refer to Lines 1062 through 1074 of Contract Attachment A) when the State identifies and documents a special need for services that are not directly related to a specific product installation.
- For example, the State may, from time to time, require demolition services and/or infrastructure architecture and design services for a facility. The Contractor shall provide these specialized services only when such services are authorized in advance by the State Cabling Department management.
- C.4.a For services described in this Section, the Contractor shall be paid the Premium Rates listed in Attachment A, when the State requests and pre-authorizes services to be provided on weekends, on State holidays, and on weekdays before 7:30 AM or after 5:00 PM. All services billed on an hourly rate basis shall be rounded (up or down) to the nearest hour for payment.
- C.4.b Several specific line items do not include labor. In those cases, the line item clearly states in the item description that labor is not included.
- C.5 Unique Equipment Rental. The Contractor may, from time to time, identify the need for equipment rental to deal with a unique requirement. The State shall reimburse the Contractor only for the direct cost of such rentals, and only when the State pre-authorizes such rentals based on documentation of need provided by the Contractor.
- C.5.a The State Cabling Department management shall pre-authorize unique equipment rental in writing upon submission of an itemized statement of need and of the costs associated with the rental of the equipment.
- C.5.b For equipment rentals pre-approved by the State Cabling Department management, the Contractor shall be reimbursed the direct costs as reflected in the rental invoice for the specified equipment.

C.5.c Regardless of an equipment rental rate, the maximum amount the State will reimburse the Contractor is limited to Two Hundred Dollars (\$200.00) per day per piece of equipment.

- C.6 Price Adjustments. The Service Rates in Attachment A are firm for a period of three years from the Contract begin date (the firm price period). Following this three-year period and in the event the Contract is extended per Section B.2., the State will process a Contract amendment to adjust the rates for the fourth year by a percentage equal to the Consumer Price Index (All Urban Consumers chart), as currently posted, for the calendar year prior to the year in which the firm price period expires. The rate adjustment shall take effect no earlier than the first calendar day following the end of the firm price period. The effective date of the rate adjustment shall initiate a new firm price period, which will last for one year, at the end of which the above process will be repeated.
- C.7 Travel Compensation. The Contractor shall not be compensated or reimbursed for travel, meals, or lodging.
- C.8 Payment of Invoice. The payment of the invoice by the State shall not prejudice the State's right to object to or question any invoice or matter in relation thereto. Such payment by the State shall neither be construed as acceptance of any part of the work or service provided nor as an approval of any of the amounts invoiced therein.
- C.9 Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment theretofore made which are determined by the State, on the basis of audits conducted in accordance with the terms of this contract, not to constitute proper remuneration for compensable services.
- C.10 Deductions. The State reserves the right to deduct from amounts which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee any amounts which are or shall become due and payable to the State of Tennessee by the Contractor.
- C.11 Automatic Deposits. The Contractor shall complete and sign an "Authorization Agreement for Automatic Deposit (ACH Credits) Form." This form shall be provided to the Contractor by the State. Once this form has been completed and submitted to the State by the Contractor all payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee shall be made by Automated Clearing House (ACH). The Contractor shall not invoice the State for services until the Contractor has completed this form and submitted it to the State.
- D. STANDARD TERMS AND CONDITIONS:
- D.1. Required Approvals. The State is not bound by this Contract until it is approved by the appropriate State officials in accordance with applicable Tennessee State laws and regulations.
- D.2. Modification and Amendment. This Contract may be modified only by a written amendment executed by all parties hereto and approved by the appropriate Tennessee State officials in accordance with applicable Tennessee State laws and regulations.
- D.3. Termination for Convenience. The State may terminate this Contract without cause for any reason. Said termination shall not be deemed a Breach of Contract by the State. The State shall give the Contractor at least ninety (90) days written notice before the effective termination date. The Contractor shall be entitled to receive compensation for satisfactory, authorized service completed as of the termination date, but in no event shall the State be liable to the Contractor for compensation for any service which has not been rendered. Upon such termination, the Contractor shall have no right to any actual general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

- D.4. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor violates any terms of this Contract, the State shall have the right to immediately terminate the Contract and withhold payments in excess of fair compensation for completed services. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any breach of this Contract by the Contractor.
- D.5. Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of the State. If such subcontracts are approved by the State, they shall contain, at a minimum, sections of this Contract pertaining to "Conflicts of Interest" and "Nondiscrimination" (sections D.6. and D.7.). Notwithstanding any use of approved subcontractors, the Contractor shall be the prime contractor and shall be responsible for all work performed.
- D.6. Conflicts of Interest. The Contractor warrants that no part of the total Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed relative to this Contract.
- D.7. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Contractor shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.
- D.8. Records. The Contractor shall maintain documentation for all charges against the State under this Contract. The books, records, and documents of the Contractor, insofar as they relate to work performed or money received under this contract, shall be maintained for a period of three (3) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.
- D.9. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.
- D.10. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.
- D.11. Strict Performance. Failure by any party to this Contract to insist in any one or more cases upon the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any such term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the parties hereto.
- D.12. Independent Contractor. The parties hereto, in the performance of this Contract, shall not act as employees, partners, joint venturers, or associates of one another. It is expressly acknowledged by the parties hereto that such parties are independent contracting entities and that nothing in this Contract shall be construed to create an employer/employee relationship or to allow either to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever.

The Contractor, being an independent contractor and not an employee of the State, agrees to carry

adequate public liability and other appropriate forms of insurance, including adequate public liability and other appropriate forms of insurance on the Contractor's employees, and to pay all applicable taxes incident to this Contract.

- D.13. State Liability. The State shall have no liability except as specifically provided in this Contract.
- D.14. Force Majeure. The obligations of the parties to this contract are subject to prevention by causes beyond the parties' control that could not be avoided by the exercise of due care including, but not limited to, acts of God, riots, wars, strikes, epidemics or any other similar cause.
- D.15. State and Federal Compliance. The Contractor shall comply with all applicable State and Federal laws and regulations in the performance of this Contract.
- D.16. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee. The Contractor agrees that it will be subject to the exclusive jurisdiction of the courts of the State of Tennessee in actions that may arise under this Contract. The Contractor acknowledges and agrees that any rights or claims against the State of Tennessee or its employees hereunder, and any remedies arising therefrom, shall be subject to and limited to those rights and remedies, if any, available under **Tennessee Code Annotated**, Sections 9-8-101 through 9-8-407.
- D.17. Completeness. This Contract is complete and contains the entire understanding between the parties relating to the subject matter contained herein, including all the terms and conditions of the parties' agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the parties relating hereto, whether written or oral.
- D.18. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions hereof shall not be affected thereby and shall remain in full force and effect. To this end, the terms and conditions of this Contract are declared severable.
- D.19. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.

E. SPECIAL TERMS AND CONDITIONS:

- E.1 Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, these special terms and conditions shall control.
- E.2 Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by facsimile transmission, by overnight courier service, or by first class mail, postage prepaid, addressed to the respective party at the appropriate facsimile number or address as set forth below or to such other party, facsimile number, or address as may be hereafter specified by written notice.

The State:

Jack T. Wilton, Sr., Manager of Cabling Services  
Department of Finance and Administration  
Office for Information Resources  
312 8<sup>th</sup> Avenue North, Suite 1500  
Nashville, TN 37243  
615-253-5652 (phone)  
615-741-8776 (fax)

The Contractor:

[NAME AND TITLE OF CONTRACTOR CONTACT PERSON]  
[CONTRACTOR NAME]  
[ADDRESS]  
[TELEPHONE NUMBER]

[FACSIMILE NUMBER]

All instructions, notices, consents, demands, or other communications shall be considered effectively given as of the day of delivery; as of the date specified for overnight courier service delivery; as of three (3) business days after the date of mailing; or on the day the facsimile transmission is received mechanically by the telefax machine at the receiving location and receipt is verbally confirmed by the sender if prior to 4:30 p.m. CST. Any communication by facsimile transmission shall also be sent by United States mail on the same date of the facsimile transmission.

- E.3 Subject to Funds Availability. The Contract is subject to the appropriation and availability of State and/or Federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate the Contract upon written notice to the Contractor. Said termination shall not be deemed a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. Should such an event occur, the Contractor shall be entitled to compensation for all satisfactory and authorized services completed as of the termination date. Upon such termination, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages whatsoever of any description or amount.
- E.4 State Ownership of Work Products. The State shall have all ownership right, title, and interest, including ownership of copyright, in all work products created, designed, developed, derived, documented, installed, or delivered to the State under this Contract. The State shall have royalty-free and unlimited rights to use, disclose, reproduce, or publish, for any purpose whatsoever, all said work products. The Contractor shall furnish such information and data upon request of the State, in accordance with the Contract and applicable State law.
- E.5 Contract Bond. Contractor shall provide a Contract Bond in an amount of TWO MILLION DOLLARS (\$2,000,000.00) based upon the State's exposure for no less than six (6) months of one hundred percent (100%) of the annual Maximum Liability amount for this Contract. The Contract Bond shall be adjusted over the course of the Contract with subsequent modifications of the annual Maximum Liability based upon the unencumbered value of the Contract amount. The unencumbered value is determined as the contract amount, less the current total of completed and accepted Work Order Sums at time of modification execution.
- E.5.a Bond shall be executed on Tennessee State Building Commission Standard Form exhibited in the Proposal Documents (RFP Section 8.2, Contract Attachment B) for the purposes of this project.
- E.5.b Bond shall be attached to the signed Contract at time of submission to the State by the Contractor.
- E.5.c Surety is the person or entity identified as such in a bond, and is referred to throughout the Contract Documents as if singular in number. The term "Surety" means the Surety or the Surety's authorized representative.
- E.5.d A Surety Company issuing a bond shall be licensed to transact business in Tennessee by the Department of Commerce and Insurance. Bonds shall have certified, and current Power-of-Attorney attached for the Surety's Attorney-in-Fact.
- E.5.e An Attorney-in-Fact who executes a bond on behalf of a Surety shall be licensed by the State of Tennessee as a Resident Agent, and shall affix license number to a bond. Alternatively, a countersignature by, and license number of, a licensed Resident Agent shall be affixed to the bond in addition to the signature of the Attorney-in-Fact.
- E.5.f Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under this Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

E.6. State Furnished Property. The Contractor shall be responsible for the correct use, maintenance, and protection of all articles of nonexpendable, tangible, personal property furnished by the State for the Contractor's temporary use under this Contract. Upon termination of this Contract, all property furnished shall be returned to the State in good order and condition as when received, reasonable use and wear thereof excepted. Should the property be destroyed, lost, or stolen, the Contractor shall be responsible to the State for the residual value of the property at the time of loss.

E.7. Incorporation of Additional Documents. Included in this Contract by reference are the following documents:

- a. The Contract document and its attachments
- b. All Clarifications and addenda made to the Contractor's Proposal
- c. The Request for Proposal and its associated amendments
- d. Technical Specifications provided to the Contractor
- e. The Contractor's Proposal

In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these documents shall govern in order of precedence detailed above.

E.8. Prohibited Advertising. The Contractor shall not refer to this Contract or the Contractor's relationship with the State hereunder in commercial advertising in such a manner as to state or imply that the Contractor or the Contractor's services are endorsed.

E.9. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Contractor by the State or acquired by the Contractor on behalf of the State shall be regarded as confidential information in accordance with the provisions of applicable state and federal law, state and federal rules and regulations, departmental policy, and ethical standards. Such confidential information shall not be disclosed, and all necessary steps shall be taken by the Contractor to safeguard the confidentiality of such material or information in conformance with applicable state and federal law, state and federal rules and regulations, departmental policy, and ethical standards.

The Contractor's obligations under this section do not apply to information in the public domain; entering the public domain but not from a breach by the Contractor of this Contract; previously possessed by the Contractor without written obligations to the State to protect it; acquired by the Contractor without written restrictions against disclosure from a third party which, to the Contractor's knowledge, is free to disclose the information; independently developed by the Contractor without the use of the State's information; or, disclosed by the State to others without restrictions against disclosure. Nothing in this paragraph shall permit Contractor to disclose any information that is confidential under federal or state law or regulations, regardless of whether it has been disclosed or made available to the Contractor due to intentional or negligent actions or inactions of agents of the State or third parties.

It is expressly understood and agreed the obligations set forth in this section shall survive the termination of this Contract.

E.10. Date/Time Hold Harmless. As required by **Tennessee Code Annotated**, Section 12-4-118, the contractor shall hold harmless and indemnify the State of Tennessee; its officers and employees; and any agency or political subdivision of the State for any breach of contract caused directly or indirectly by the failure of computer software or any device containing a computer processor to accurately or properly recognize, calculate, display, sort or otherwise process dates or times.

E.11. Hold Harmless. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other

entity which may be injured or damaged as a result of acts, omissions, or negligence on the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys for the State in the event such service is necessitated to enforce the terms of this Contract or otherwise enforce the obligations of the Contractor to the State.

In the event of any such suit or claim, the Contractor shall give the State immediate notice thereof and shall provide all assistance required by the State in the State's defense. The State shall give the Contractor written notice of any such claim or suit, and the Contractor shall have full right and obligation to conduct the Contractor's own defense thereof. Nothing contained herein shall be deemed to accord to the Contractor, through its attorney(s), the right to represent the State of Tennessee in any legal matter, such rights being governed by **Tennessee Code Annotated**, Section 8-6-106.

- E.12. Tennessee Consolidated Retirement System. The Contractor acknowledges and understands that, subject to statutory exceptions contained in **Tennessee Code Annotated**, Section 8-36-801, *et. seq.*, the law governing the Tennessee Consolidated Retirement System, provides that if a retired member returns to State employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor may be required to repay to the Tennessee Consolidated Retirement System the amount of retirement benefits the Contractor received from the Retirement System during the period of this Contract.
- E.13. New Item List. During the course of this Contract, the State may require the Contractor to update the Premise Wiring and Equipment Installation Services Item List (Attachment A) with additional product(s) or service(s). The additional item(s) shall be within the scope of services. The State shall provide the Contractor with a written description of the additional product(s) or service(s), and the Contractor shall submit a price for the additional item(s). If the State and the Contractor reach an agreement regarding the item(s) and the price associated with the item(s), the agreement shall become effective by means of a contract amendment. Any such amendment requiring additional item(s) must be mutually agreed upon by the parties and signed by the Contractor and the head of the procuring agency and must be approved by other State officials as required by State laws and regulations.
- E.14. Warranty Requirements. It is expressly understood and agreed the warranty requirements set forth in Section A.2.c of this Contract shall survive the termination of this Contract.
- E.15. Competitive Procurements. This Contract provides for reimbursement of the cost of goods, materials, supplies, equipment, or services. Such procurements shall be made on a competitive basis, where practical.
- E.16. HIPAA Compliance. Contractor warrants to the State that it is familiar with the requirements of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and its accompanying regulations, and will comply with all applicable HIPAA requirements in the course of this contract. Contractor warrants that it will cooperate with the State in the course of performance of the contract so that both parties will be in compliance with HIPAA, including cooperation and coordination with State privacy officials and other compliance officers required by HIPAA and its regulations. Contractor will sign any documents that are reasonably necessary to keep the State and Contractor in compliance with HIPAA, including but not limited to business associate agreements.



**- - Proceed to next Page - -**

**IN WITNESS WHEREOF:**

**BY CONTRACTOR:** \_\_\_\_\_  
[CONTRACTOR LEGAL ENTITY NAME]:

Signature: \_\_\_\_\_ Date

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**AND BY OWNER:     STATE OF TENNESSEE**  
**Department of Finance and Administration**

**APPROVED:** \_\_\_\_\_  
Michael A. Fitts, State Architect: Date

**APPROVED:** \_\_\_\_\_  
M.D. Goetz, Jr. Commissioner Date  
Department of Finance and Administration:

**APPROVED:** \_\_\_\_\_  
John G. Morgan, Comptroller of the Treasury Date  
for compliance with policy and statute

**APPROVED:** \_\_\_\_\_  
Paul G. Summers, Attorney General Date  
for form and legality

End of Contract Form

## **CONTRACT ATTACHMENT A**

Following contract negotiations with the successful Proposer, the prices received from the successful Proposer in the Cost Proposal Spreadsheet (RFP Attachment 9.2) will be inserted here. These prices will become the actual Service Rates referenced in Contract Section C.3, upon award of the Contract. The "Projected Annual Usage" from the Cost Proposal Spreadsheet is for evaluation purposes only and will be deleted prior to inserting the Service Rates in Contract Attachment A.

**CONTRACT BOND**  
TENNESSEE STATE BUILDING COMMISSION STANDARD FORM

**BOND NO.** \_\_\_\_\_

**Know all men by these presents:** that we

(hereinafter called the "Principal") and

hereinafter called the "Surety") do hereby acknowledge ourselves indebted and securely bound and held unto

(hereinafter called the "Owner"), and in the penal sum of

good and lawful money of the United States of America, for the use and benefit of those entitled thereto, for the payment of which, well and truly to be made, we bind ourselves, our heirs, our administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

**But the condition of the foregoing obligation or bond is this:**

**Whereas**, the Owner has engaged the principal for the sum of

to complete the Work of the project titled:

as more fully appears in a written agreement or contract bearing the date of

a copy of which said agreement or contract is by reference hereby made a part hereof, as fully and to the same extent as if copied at length herein, and it is the desire of the Owner that the Principal shall assure all undertakings under said agreement or contract and shall assure and protect all laborers and furnishers of material on said Work both as provided by **Tennessee Code Annotated** Sections 4-15-102 (f)(2) and 12-4-201 through 12-4-206, and any and all amendments thereto, and shall assure the prompt payment of claims as provided by **Tennessee Code Annotated** Sections 12-4-207 through 12-4-208, and any and all amendments thereto. The Principal shall also comply with provisions of **Tennessee Code Annotated** Sections 12-4-401 through 12-4-415, and any and all amendments thereto, pertaining to the payment of the prevailing wage rate.

**Now, therefore,** if the Principal shall fully and faithfully perform all undertakings and obligations under the contract herein before referred to and shall fully indemnify and hold harmless the Owner from all costs and damage whatsoever which it may suffer by reason of any failure on the part of the Principal to do so, and shall fully reimburse and repay the Owner any and all outlay and expense which it may incur in making good any such default, and shall fully pay for all of the labor, material and work used by the Principal and any immediate or remote sub-contractor or furnisher of material under him in the performance of said contract, in lawful money of the United States, as the same shall become due, then this obligation or bond shall be null and void, otherwise to remain in full force and effect.

**And** for value received, it is hereby stipulated and agreed that no change, extension of time, alteration or addition to the terms of the contract or to the Work to be performed thereunder or to the specifications accompanying the same shall in any wise affect the obligation under this bond, and notice is hereby waived of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the specifications.

**In witness whereof** the Principal has hereunto affixed its signature and Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Executed in \_\_\_\_\_ counterparts.

**Witness:**

\_\_\_\_\_  
(name of Principal)

\_\_\_\_\_  
(name of Surety)

\_\_\_\_\_  
(authorized signature)

\_\_\_\_\_  
(signature of Attorney-in-fact)

\_\_\_\_\_  
(name of signatory)

\_\_\_\_\_  
(name of Attorney-in-fact)

\_\_\_\_\_  
(title of signatory)

\_\_\_\_\_  
(Tennessee license number of Agent or Attorney-in-fact)

\_\_\_\_\_  
(countersignature of resident Agent  
if not same as Attorney-in-fact)

*Surety Company issuing bond shall be licensed to transact business in State of Tennessee by Tennessee Department of Commerce and Insurance. Bonds shall have certified and current Power-of-Attorney for the Surety's Attorney-in-Fact attached. Attorney-in-fact who executes bond on behalf of Surety shall be licensed by and a resident of State of Tennessee, and shall affix license number to bond; or, countersignature by a licensed agent who is a resident of State of Tennessee, and the agent's license number, shall be affixed to the bond in addition to the signature of the Attorney-in-Fact.*

# State of Tennessee

## Telecommunications Voice and Data Wiring Standards



# State of Tennessee

### TELECOMMUNICATIONS VOICE & DATA WIRING STANDARDS

REVISION DATED 1-30-03

State Telecommunications Voice and Data Wiring Standards are updated from time to time in response to changes in technology, terminology, or other amendment deemed necessary by the State. Vendors, Contractors, and Installers are responsible to confirm the edition of wiring standards currently authorized by the State Office for Information Resources (OIR) prior to advancing any telecommunications wiring project.

## A. OVERVIEW

The State of Tennessee Telecommunications has adopted a fixed set of standards to which all communications (which includes telephone, data, fiber optics, video) installations should adhere. The purpose of this document is to describe the wiring standards that have been adopted and to offer guidelines for analysts, system planners, space planners, designers, and architects in approaching telecommunications wiring planning.

In the past, any form of telecommunications wiring has typically been treated as an adjunct to the service it supported. For example, a customer would call the telephone company to install the telephone wires (telephone companies are no longer in this business), call the computer vendor to design and install the computer network wiring, and call the cable TV company to install video cable.

In today's high-speed information society, it is no longer practical or prudent to view the wiring as an adjunct to the equipment. The long-term consequence will be multiple, uncoordinated, or redundant wiring systems, resulting in unstructured design and location of wiring closets making them inadequate to support electronic equipment and high speed communications. This, in turn, will result in greater difficulty and much higher cost in plant administration.

The computer and communications equipment used in a building will become obsolete and be replaced several times over the potential life cycle of a well designed, structured wiring system installation. It is clear that today's networks and equipment will be supplanted by more sophisticated and demanding technologies, that users will require a means to start with modest installations that can accommodate future expansion into building and campus-wide networks (i.e., the literal 'explosion' of LAN requirements), and that facilities will be frequently restructuring their use of space to meet changing needs.

Flexibility in connectivity is essential to providing adequate service to our customers. Because of the wide variation in the assignment and the use of office space, a well-defined, fixed set of requirements is necessary to provide this flexibility. Work Area wiring must be capable of supporting a wide variety of voice/data configurations. We know that speed and bandwidth requirements for data will grow rapidly within the next few years, and that the wiring must be capable of supporting higher speed and wider bandwidth data than that required by today's devices.

Wires and cables form part of the physical infrastructure that is the transport media for transmitting information throughout an organization, connecting a variety of devices such as telephones, personal computers, terminals, modems, facsimile machines, and videoconferencing equipment. The communications designer must consider many details to ensure that a cabling project goes smoothly. The cabling plan should address building codes, security, disaster planning, and aesthetic concerns. Good cabling plans attempt to "future-proof" the network by taking into account emerging and evolving network technologies. Cabling projects are *never* temporary solutions, regardless of expected use.

Successful cabling systems are based on standards set by organizations such as the International Standards Organization (ISO), the Electronics Industries Association (EIA), the Telephone Industries Association (TIA), the American National Standards Institute (ANSI), Building Industry Consulting Services International (BICSI), the Institute of Electrical and Electronics Engineers (IEEE), and others. The first wiring standard developed, the TIA/EIA-568 standard, was approved in July 1991.

The Open Systems Interconnection (OSI) Model is a seven-layer communications processing model used in *all* communications today. The OSI bottom layer concerns the physical layer, the cables, connectors, and components carrying the signals between users. This physical layer is critical to telecommunications systems performance.

All cabling placed by the State is installed to conform to TIA/EIA and BICSI TDM (Telephone Distribution Methods) Standards, newest revision. In addition the standards documents listed at the end of this section should be referenced in the event any discrepancies or confusion occur.

Management of wiring systems and maintenance of wire records has also emerged as a *major* cost consideration. A well-designed structured wiring system will not remain that way for very long without a good wire management system. Maintenance and rearrangement costs will increase drastically in the absence of a wire management system.

We are no longer in a world where communications of any kind is a luxury; it is now a business necessity. The industry now views telecommunications wiring as the “Fourth Utility” along with Plumbing, Electrical, and HVAC. Wiring has now evolved into a basic element of a facility’s infrastructure; a “*Fourth Utility*”.

The treatment of telecommunications wiring infrastructure as a long-term investment is essential.

Telecommunications wiring infrastructure must be planned for and funded with the same level of importance and over similar time horizons as all other utilities. An important point to consider at the onset of a cabling venture is that it is less expensive in the long run to over-estimate communications needs at the beginning than it is to add capacity after the fact.

The initial cost of a cabling venture *always* seems too high. But, it is always necessary to consider near-term and future growth when considering these costs. Structured cabling plans are usually more expensive than unstructured plans in the initial installation. However, structured plans become more cost effective over time as moves and additions occur, because it is easy and relatively inexpensive to move and add Work Areas in a structured plan. In most cases, adds and moves require only simple cabling to the nearest communications wiring closet and standard jacks at the Work Area.

Today’s approach toward building wiring provides the flexibility to support the higher speed communications that tomorrow’s networks will require, all in a structure that allows for proper maintenance and record keeping for the wiring systems as additions, moves, and network reconfigurations become necessary. It is this approach that planners and designers must take in planning building and campus infrastructure.

There are two basic elements to this approach:

1. The recognition of communications wiring as the “Fourth Utility” in the building infrastructure, and,
2. the use of a modular concept as exemplified in a “Structured Wiring Plan”.

A key element in this approach is to plan projects in conjunction with capital projects, property management, other agencies, suppliers, and vendors, emphasizing the importance of looking to the future in planning telecommunications wiring.

It is essential that Telecommunications Planners and designers be included in the inception, early planning, design, and implementation phases of every Diagram - Structured Cabling System

---

## REFERENCE DOCUMENTS

1. **TIA/EIA 568A, -1, -2, -3, -4(ANSI/TIA/EIA 568-A-95)** -Commercial Building Telecommunications Wiring Standards.
2. **TIA/EIA-569A(ANSI/TIA/EIA 569-A-98)** - Commercial Building Standard for Telecommunications Pathways and Spaces.

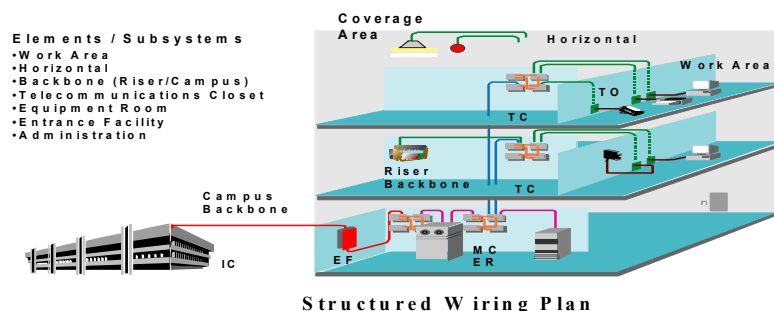


3. **TIA/EIA-607(ANSI/TIA/EIA 607-94)** - Commercial Building Grounding and Bonding Requirements for Telecommunications.
4. **TIA/EIA-TSB67** - Transmission Performance Specifications for field-testing of Unshielded, Twisted Pair Cabling Systems.
5. **TIA/EIA-TSB40** – Additional Transmission Performance for 4-pair Category5 Cable.
6. **TIA/EIA-TSB72** - Centralized Optical Fiber Cabling Guidelines.
7. **TIA/EIA-TSB75** - Additional Horizontal Cabling Practices for Open Offices  
(ISO/IEC) DIS 11801.
8. Building Industries Consulting Services International (**BICSI**) Telephone Distribution Methods Manual(**TDDM**), Latest Revision.
9. National Electrical Manufacturers Association (NEMA).
10. American Society for Testing Materials (ASTM).
11. National Electric Code (NEC®).
12. Institute of Electrical and Electronic Engineers (IEEE).
13. UL Testing Bulletin.
14. American National Standards Institute (ANSI) X3T9.5 Requirements for UTP at 100 Mbps.
15. AVAYA SYSTIMAX® Structured Cabling Systems, Performance Specifications.
16. AVAYA SYSTIMAX® Structured Cabling Systems, Components Guide, Latest Issue.
17. AVAYA Generic Specifications: Fiber Optic Outside Plant Cable, Latest Issue.
18. Underwriters Laboratories (UL®) Cable Certification and Follow Up Program

## B. Wiring Plan

The “High Performance Structured Wiring Plan”, as established by the State of Tennessee, is defined as a complete Structured Cabling System solution to the facility telecommunications wiring needs. This plan is applicable to both vertical installations (multi-floor and high-rise buildings) and horizontal (campus) installations as well as smaller buildings. The implementation of a High Performance Structured Wiring Plan insures the capability to satisfy the needs of the various systems at any time. Elements of the Structured Wiring Plan are identified in this document.

The State of Tennessee has established a “High Performance Structured Wiring Plan” that provided a long term warranty (20 to 30 years) on all cable installations that includes material and workmanship, and channel performance as well.



## C. Communications Rooms

### 1) Main Cross Connect (MC)

All voice distribution and most data distribution emanates from this point. Administration of the system also begins here. The local telephone company's Entrance Facility (**EF**) should also be located in this room or connect directly to this room via tie cable. Telephone Company network interface (RJ-21X blocks) will be located here. The physical requirements of the network interface are defined in the TIA/EIA-569 Standard. An **MC** (sometimes called **MDF**) may also occasionally be used also as an Intermediate Cross-connect (**IC**).

The **MC** must be well ventilated, environmentally controlled on a 24 hours per day, 7 days per week basis, maintain a positive pressure with a minimum of one air change per hour, and not present a hostile environment to computer and telephone equipment.

Heat dissipation will vary from application to application and will be provided during the project design. Walls for this room should extend from the floor to the ceiling(floor) above and not be open to a plenum ceiling. Dropped ceilings or permanent ceilings should not be installed in these rooms. Lighting should be installed at a height of 8' 6" and designed to provide a minimum of 50 foot-candles measured at 3 feet above the finished floor.

At least 2 walls should be lined with ¾ inch, AC plywood, 8 feet high. Plywood should be fire retardant or painted with a fire retardant light gray or white (NOT BLACK) paint. Duplex electrical outlets should be installed at the bottom of the plywood at 2' intervals with no more than two (2) duplex outlets per 20 AMP dedicated circuit. Some installations may require emergency power outlets.

A multi-point ground, conforming to TIA/EIA 607 and NEC Article 800 and Article 250, with a minimum 6 AWG wire, **must be provided** in this space to be used for grounding protection devices and equipment.

Doors should be at least 36 inches wide and 80 inches tall, installed to swing out. Floors should be tile or treated concrete to minimize dust.

The room must be secure with access limited to responsible telecommunications personnel. All communication rooms should have locking doors with keys unique to communications. In most applications, particularly a multi-floor building, these rooms should be a **minimum of 10' x 12'**.

**Boiler rooms, air exchange rooms, janitorial closets, electrical distribution closets, or areas with, water heaters, wet sinks, are not acceptable for communications use.**  
***It is essential that these spaces be dedicated to telecommunication.***

## **2) Intermediate Cross-Connect (ic)**

Voice and data backbone cabling from the **MC** terminates in the **IC** (sometimes called IDF) for distribution to station cabling. An **IC** can be on the same floor, another floor, or another building. A minimum of 1 room/closet should be located on each floor, however, the location and total number of these **IC**'s will be determined by station drop length.

TIA/EIA token ring requirements dictate a maximum station drop length of 90 meters (295 FEET). Station cabling is connected to the distribution cabling via hardwire cross-connects or patch cords. Data communications servers, Ethernet Hubs, Multi-Station Access Units (MAU), or other network equipment is usually located here.

A multi-point ground, conforming to TIA/EIA 607 and NEC Article 800 and Article 250, with a minimum 6 AWG wire, must be provided in this space to be used for grounding protection devices and equipment.

The **IC** must be well ventilated, environmentally controlled on a 24 hours per day, 7 days per week basis, maintain a positive pressure with a minimum of one air change per hour, and not present a hostile environment to computer and telephone equipment.

Walls for this room should extend from the floor to the ceiling(floor) above and not be open to a plenum ceiling. Dropped ceilings or permanent ceilings should not be installed in these rooms. Lighting should be installed at a height of 8' 6" and designed to provide a minimum of 50 foot-candles measured at 3 feet above the finished floor. At least 2 walls should be lined with ¾ inch, AC plywood, 8 feet high. Plywood should be fire retardant or painted with a fire retardant light gray or white (**NOT BLACK**) paint.

Duplex electrical outlets should be installed at the bottom of the plywood at 2' intervals. Outlets should be 110VAC, 20 AMP, dedicated circuits with isolated ground, and no more than two (2) duplex outlets per circuit. Doors should be at least 36 inches wide and 80 inches tall, installed to

swing out. Floors should be tile or treated concrete to minimize dust. The room must be secure with access limited to responsible telecommunications personnel. **All communication rooms should have locking doors with keys unique to communications.** In most applications these rooms should be a **minimum of 8' x 10'**.

**Boiler rooms, air exchange rooms, janitorial closets, electrical distribution closets, or areas with, water heaters, wet sinks, are *not* acceptable for communications use.**

***It is essential that these spaces be dedicated to telecommunication.***

### **3) Telecommunications Closet**

In small areas where an occupied space of less than 5000 square feet is being served, walk-in closets are sometimes acceptable. Station cabling to the area being served is terminated in this closet. In some applications the telephone company Network Interface is also located here. Data communications servers, Ethernet Hubs, Multi-Station Access Units (MAU), or other network equipment may also be located here. A multi-point ground, conforming to TIA/EIA 607 and NEC Article 800 and Article 250, with a minimum 6 AWG wire, must be provided in this space to be used for grounding protection devices and equipment.

The **closet** must be well ventilated, environmentally controlled, and not present a hostile environment to computer and telephone equipment. Walls for this room should extend from the floor to the ceiling(floor) above and not be open to a plenum ceiling.

Dropped ceilings or permanent ceilings should not be installed in these closets. Lighting should be installed to provide adequate lighting. The entire back wall should be lined with  $\frac{3}{4}$  inch, AC plywood. Plywood should be fire retardant or painted with a fire retardant light gray or white (**NOT BLACK**) paint.

Duplex electrical outlets should be installed at the bottom of the plywood at 2' intervals. Outlets should be 110VAC, 20 AMP, dedicated circuits with isolated ground, and no more than two (2) duplex outlets per circuit. Some installations may require emergency power outlets. Floors should be tile or treated concrete to minimize dust.

A minimum of 1 room/closet must be located on each floor, however, the location and total number of these closets will be determined by station drop length. TIA/EIA token ring requirements dictate a maximum station drop length of 90 meters (295 FEET).

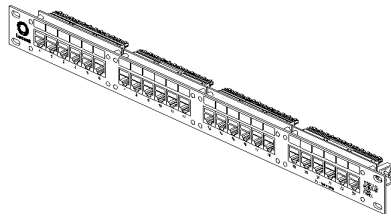
**The room must be secure with access limited to responsible telecommunications personnel. All communication rooms should have locking doors with keys unique to communications. If access can not be limited, then a locked cabinet of appropriate size (see page 17) must be used.** Closets should not be less than 2 feet deep by 8.5 feet wide. Doors should be installed to swing out to provide clear access (NO center post and NO threshold).

**Boiler rooms, air exchange rooms, janitorial closets, electrical distribution closets, or areas with, water heaters, wet sinks, are *not* acceptable for communications use.**

***It is essential that these spaces be dedicated to telecommunication.***

**The design aspects of the equipment room are specified in the TIA/EIA 569 Standard. Typical installations in the MC, IC or TC include some or all of the following equipment:**

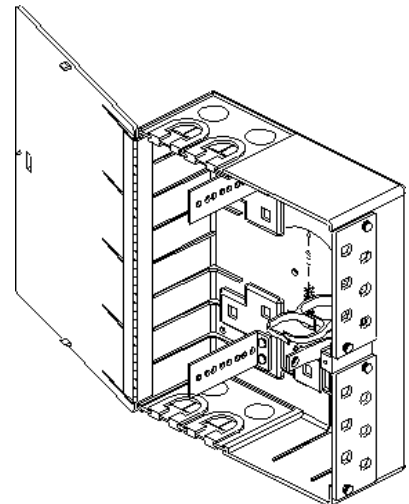
#### 4) UTP Patch Panels



- a) All Modular jack panels shall be wired to TIA/EIA 568A standard.
- b) The wiring block shall be able to accommodate 24 AWG cable conductors.
- c) The block shall be Underwriter's Laboratories (UL) listed.
- d) All modular cross connect panels shall be UL listed Category 5.
- e) A 110 IDC block shall provide for the termination of horizontal, equipment, or tie cables.

#### 5) Fiber Optic Patch Panels

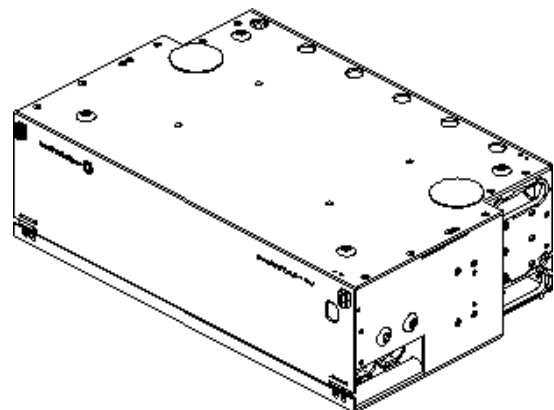
- a) **LightGuide Interconnection Unit (LIU)** is a termination and administration point for the fiber in the network. The LIU will protect the connectorized fiber from mechanical stress, macro-bending loss at the connection point, tampering with the circuits. The LIU will provide circuit identification. The LIU shall provide cross-connect, inter-connect, splicing capabilities and include support hardware to properly terminate and ground the cables, routing the fibers and jumpers and mount splices in a wall field.



1. The LIU shall have connector panels that snap into the side of the module and accommodate ST, FDDI, SMA, FC, D4 or SC connectors.
2. The LIU shall provide terminating, cross-connecting or interconnecting capability of 12, 24 or 48 fibers. The units may be stacked to provide additional fiber termination capacity.
3. The LIU shall be made of lightweight polycarbonate and have a lockable hasp for additional security.
4. The LIU shall be UL<sup>®</sup> approved. The LIU shall be NEMA 4 rated for industrial environments.
5. The manufacturer must be ISO 9001 certified.

- b) **LightGuide Distribution Shelf** is a high-fiber-count termination and administration point for the fiber cables in the network. The LDS will protect the connectorized fiber from mechanical stress, macro-bending loss at the connection point and tampering with the circuits. The LDS will provide a place for circuit identification. The LDS shall be wall or rack mountable depending on the location requirement. The units must fit into either 19" or 23" frame arrangements.

The LDS shall consist of a modular enclosure with front and rear access and can be fully administered from the front or rear.



The LDS shall have a translucent, removable cover over the connector panels and connector panels that snap into the front of the shelf and accommodate ST, FDDI, SMA, FC, D4 or SC connectors. The LDS shall provide terminating capability of 24, 48, 72, 144 or 216 fibers.

- c) **Single Space Combination Fiber Shelf** is a frame mounted that terminates, provides cross connection, interconnection, splicing and fiber identification for up to 24 fibers in equipment racks. The shelf will provide protection from mechanical stress on the cable and fibers and from macro-bending losses.
1. The shelf shall take no more than 1.72 inches (one unit) of vertical space on the rack.
  2. The shelf must be mountable in either a 19" or 23" wide rack, and have a jumper routing trough.
  3. The shelf shall be accessible from the front and rear and slide out to allow access from the top.
  4. The connector panels will accommodate ST, SC and SC duplex connectors in removable, snap-out panels.
  5. The unit must be UL<sup>®</sup> approved and must be ISO 9001 certified.

#### **D. Communications cabling**

##### **1) STAR TOPOLOGY**

All voice and data cabling, including fiber and copper from the MC to the IC, is installed in a "Star" topology. By using a star method of cabling, administration may be performed from the MC to each IC without having to "daisy chain" through other IC's or telecommunications outlet/connectors. Should daisy chaining be required for a specific application (i.e., AS400), connection can be made at the MC via patch cords or jumpers. Star Topology also conforms to TIA/EIA standards.

##### **2) BACKBONE CABLING**

###### **Copper**

The Backbone cabling provides interconnection between telecommunication closets, equipment rooms and entrance facilities. It consists of the backbone cables, intermediate and main cross-connects, mechanical terminations and patch cords or jumpers used for backbone-to-backbone cross-connection. Distribution for voice is installed in a star configuration with all cables beginning in the MC and terminating in the IC. Riser cables should be of multi-pair design with 24 AWG (American Wire Gauge), polyethylene insulated conductors (PIC) using either filled core shielded buried, air core aerial shielded self supporting or shielded air core riser cabling as required by the application. Cable within a building must conform to specifications in the BICSI Telephone Distribution Methods Manual, and cable installed in conduit or aerial to another building or location must conform to BICSI Customer-Owned Outside Plant Manual specifications.

Connection from distribution cabling to station cabling is accomplished with either hardware cross-connects or patch cords. Cross-connections for Category 5/5E/6 & Category 6 cabling must be made with cross-connect wire or patch cords with equal rating. Cross connects should include no more than two hierarchical levels of cross-connects, bridge taps are not allowed, and main and intermediate cross-connect jumper or patch cord lengths should not exceed 20 meters (66 feet).

Although UTP should be used for most low voltage applications there may be circumstances where the distance requirements dictate the use of many different cabling mediums. Riser cables of other types may also be required to support other applications. Other installations could include:

1. STP Type 1 Cable
2. 2 Pair or 4 pair, 24 AWG, Category 5, Shielded Twisted Pair Cable
3. Coaxial Cable, 75 Ohm, Specification RG-59, RG-6, or RG-11
4. Single Mode Fiber Optic Cable

These various cables are be used to distribute a wide range of data systems, i.e., Ethernet, Token Ring, 3270, CATV, video, etc.

#### **Fiber Optic – Multi-Mode**

All new buildings or major renovations include a Multi-Mode Fiber Optic riser cable. This fiber optic cable should be installed from the MC to each IC for data and video distribution. Each cable should consist of a minimum of 12, 62.5/125µm, FDDI Grade, Multi-Mode fibers. Larger cable may be required based on the size of the building or campus and the requirements of the customer. Fiber optic cable should be terminated with SC Type connectors and distributed in a LightGuide Interconnection Unit (LIU) at the IC, a LightGuide Termination Shelf (LTS), or a rack mounted modular connector panel at the MC. Modular Patch Panel System described in "Communications Rooms" Section above. The termination block shall support the appropriate Category 5/5E/6 or 6 applications, including 100 Mbps TP-PMD and 155 Mbps ATM, and facilitate cross connection and inter connection using modular patch cords.

#### **Fiber Optic – SingleMode**

SingleMode Fiber optic cable will be used what distances exceed two (2) kilometers. Each cable should be a minimum of 12, 8.3 – 9.6/125µm, TIA/EIA Class 4d, Singlemode fiber designed for Dense Wave Division Multiplexing (DWDM).

#### **Video/CATV**

Video cabling is distributed from the MC to each IC using RG-6 (or equivalent), 75 Ohm coaxial cable, terminated with "F" type connectors for connection to various equipment or splitters and/or amplifiers. All cables must be plenum rated or installed in conduit

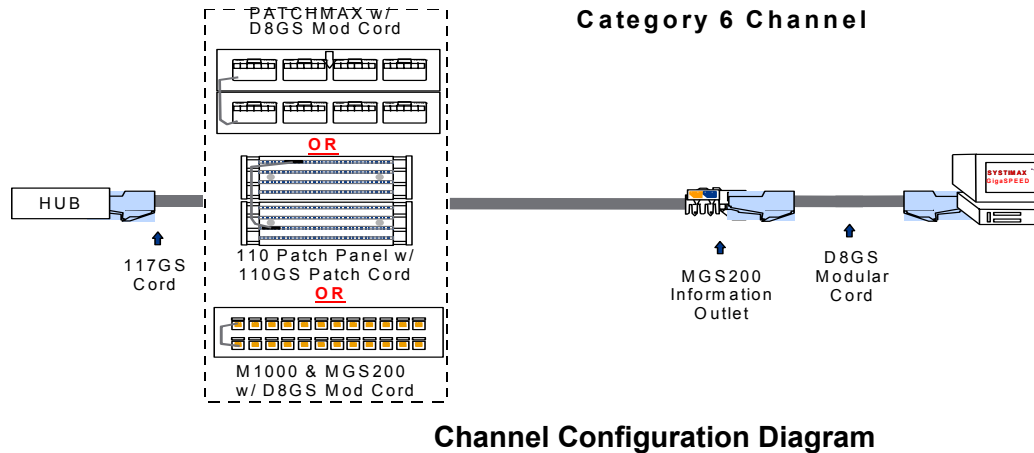
### **3) WORK AREA CABLING**

Also called station wire, cabling from the MC, IC or TC, to each telecommunications outlet/connector is known as work area cabling. With this configuration, conforming to the Commercial Building Telecommunications Cabling Standard and the ANSI/TIA/EIA-568-A configuration standards, all Work Area cables emanate from the IC. It typically consists of:

- a) one (1) 4 pair, Category 5 (Orange) or Category 5e or Category 6 (Dark Blue), plenum rated, unshielded twisted pair (UTP) cable for data, terminated in an 8 position / 8 conductor jack rated to match the cable, and,
- b) one (1) 4 pair, Category 3 (White), plenum rated, unshielded twisted pair (UTP) cable for voice terminated in an 8 position / 8 conductor jack.
- c) Connection from distribution cabling to station cabling is accomplished with either hardwire cross-connects or patch cords.

**All work area copper wiring and connectors conform to the following specifications:**

Category	Standard	Specifications	Applications
Category 3	ANSI/TIA/EIA 568-A CATEGORY 3 NEMA 100-24-SATD UL LEVEL III	100 Ohm Voice and Data Applications up to 16 MHz	10BASE-T 16-Mbps Token Ring IBM 3270, 34/36/38 , AS400 Voice /ISDN
Category 5	ANSI/TIA/EIA 568-A	100 Ohm	10BASE-T, 100BASE-T4
Category 5/5E/6	ANSI/TIA/EIA 568-A-1 ANSI/TIA/EIA 568-A-2	Voice and Data Applications up to 200 MHz	100BASE-TX, 100BASE-VG 16-Mbps Token Ring
Category 6	ANSI/TIA/EIA 568-A-3 ANSI/TIA/EIA 568-A-4 TSB-36, TSB-40A NEMA 100-24-XF UL Level IV		100-Mbps TP-PMD 155-Mbps ATM



#### 4) Numbering and labeling

##### a) **Closets**

Closet doors will be labeled with the proper designation, i.e.,

- **FF** = Floor Number 00 – 99, i.e., or applicable designation.
- **C** = Closet Number A – Z

##### b) **Racks**

Racks will be identified in each Telecommunications Closet using a one digit alphanumeric symbol. Racks will be numbered sequentially, 1 thru 9, depending upon the number of racks. If racks are not used, i.e., wall mounted shelves, the same scheme applies. The shelves will be numbered as if it were a rack.

##### c) **Patch Panels**

Patch Panels will be identified in each Telecommunications Closet using an alpha character, A thru Z, depending upon physical location on patch panel, numbered from top to bottom.

##### d) **110 Hardware**

110 hardware will be identified in each Telecommunications Closet using an alpha character, A thru Z, depending upon physical location on patch panel and the location on the backboard. They will be numbered from top to bottom

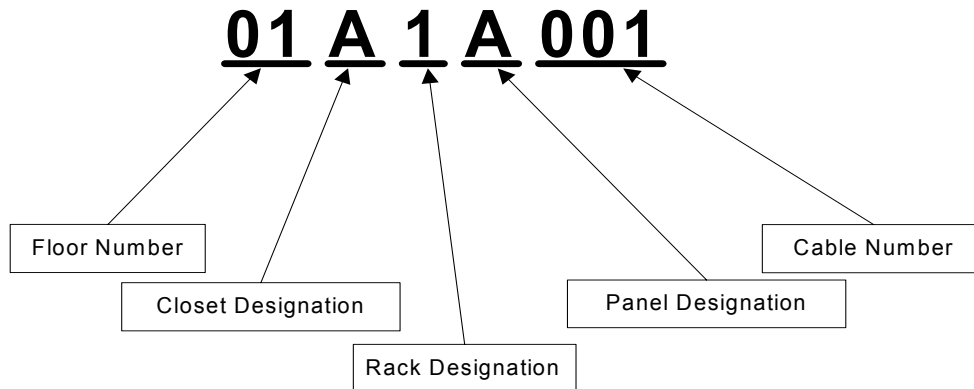
##### e) **Workstation Cables and Faceplates**

All cables will be labeled with a nine digit alphanumeric symbol as follows. One label will be associated with each jack or outlet, therefore one label will be associated with each jack or outlet; a dual faceplate with 2 jacks will have 2 labels; a quad faceplate with 4 jacks will have 4 labels; etc. *Spaces not required.*

##### f) **Example:**

**FF C R P XXXX**

- **FF** = Floor Number 00 to 99
- **C** = Closet Designation A to Z
- **R** = Rack Number 1 to 9
- **P** = Panel Number A to Z
- **XXX** = Cable Number 000 to 999



All Telecommunications Closets will be identified as Floor Number followed by the closet identifier. Closets will be designated as A - Z. It is highly unlikely that you will have more than 26 Telecommunications Closets in a building on one floor. If there are two closets, one will be A, the other B. Three closets will be A, B, & C.

Cable Numbers will be three digit sequential numbers, 001 - 999. Numbering will be by floor, not by building. Therefore, the first floor will be 001 - 999, the second floor will be 001 - 999. Sequential numbering will not change by Telecommunications Closets. ***There must not be duplicate numbers on any floor even though there may be multiple closets.***

- **25A1A025** = 25th floor, Telephone Closet A, rack 1, panel A, cable number 025.

Cables will be labeled in at least three (3) places. A label must be affixed to the wire behind the faceplate of the jack, on the faceplate, and behind the patch panel or 110 hardware at the Telecommunications Closets.

## 5) **Work Area Cords**

WORK AREA CORDS, SOMETIMES CALLED 'LINE CORDS' OR STATION CORDS', CONNECT THE WORK AREA OUTLET TO THE WORKSTATION OR OTHER WORK AREA EQUIPMENT. ANSI/TIA/EIA-568-A AND ISO/IEC 11801, THESE CABLES SHOULD BE NO LONGER THAN 5 METERS (16.5 FEET) IN LENGTH.

## 6) **INSTALLATION**

Some end users and designers believe that small installations, especially those using unshielded twisted pair cables, are simple and easy to install and often will install one or more cables without proper qualifications. This often results in incorrect or poor installations.

### **Incorrect installations cause more problems than any other single factor.**

Local area network specialists report that most network problems are the result of cabling failure, either from improper installation or from subsequent damage. Cable installation requires attention to minute details and care in handling the medium.

**All** components ***must*** match the specified cable. Category 5/5E/6 UTP is currently the most popular cable and requires considerable attention to detail. Category 5/5E/6 cable requires all Category 5/5E/6 connectors, patch panels, and other components. Mixing Category 5/5E/6 cable with other types of connectors leads to lower or unreliable transmission rates. Category 5/5E/6 UTP installers can untwist no more than one-half inch of cable at the connectors; longer twists lead to network instabilities.

The State of Tennessee specifies that all cable installations be adequately tested. Installers must have a variety of tools available to test copper and fiber-optic cables. Any installer who balks at certifying the cabling installation will be rejected.



a) **Color Coding**

Using color-coded termination fields will make cable plant administration easier. The color codes for cable termination fields are:

<u>COLOR</u>	<u>IDENTIFIES</u>
<b>Orange</b> .....	Demarcation Point (RJ21X / LEC interface)
<b>Green</b> .....	Network Connections (Network and Auxiliary Equipment)
<b>Purple</b> .....	Common Equipment (PBX's, LAN's, Multiplexors, switching, data)
<b>White</b> .....	First Level Backbone (MC to IC or closet)
<b>Gray</b> .....	Second Level Backbone (IC to closet)
<b>Blue</b> .....	WorkStation Cable (Horizontal cable)
<b>Brown</b> .....	Interbuilding Backbone (Campus Cable Termination's)
<b>Yellow</b> .....	Miscellaneous (Auxiliary, alarms, security, etc.)
<b>Red</b> .....	Key Telephone Systems

b) **Physical Factors**

There are many physical factors to consider about cables, including weight, diameter, bending radius, pull force, and termination. While cables look strong, they can be easily damaged. Cables have pull load and geometric deformation limits. If pulled too hard, a copper medium can stretch and destroy the geometry. Kinking, bending, and crushing can damage cables by either breaking the medium or causing geometric deformations can degrade performance significantly. A Category 5/5E/6 installation may test at only Category 3 specifications or lower because of a sloppy installation or badly mixed components.

- 1) **Weight** Cable weights become important in suspended ceiling loads. Cables hang from ceiling supports able to accommodate the weight. Cables should be supported every 10 to 20 feet, depending on cable weight, to prevent sags and eventual cable failure. Bridle rings are not acceptable. Cables installed above a suspended ceiling may service either the floor above or the floor below. Cables should never support connected devices (e.g., amplifiers, splitters, and transceivers). These devices must be individually attached to a wall, ceiling, or other sturdy structure.
- 2) **Cable Diameter** Cable diameter most often becomes a factor in conduit installations and in riser systems between floors. It is very important to consider growth when designing conduit or riser systems.
- 3) **Bending Radius** Minimum bending radius becomes extremely important when installing cables. Violating bending radius recommendations can cause cracks in one or more wires within the cables, leading to future problems. Fiber-optic cable, in particular, is extremely sensitive to bend radius, and kinks in fiber-optic cable can render the cable useless. All cables, regardless of type, must be installed with as few bends as possible. Cable kinks and cracks are simply problems waiting to happen. If manufacturers specifications are not available, a general 'rule of thumb' for copper cable is a bend radius of not less than 10 times the outside diameter of the cable, and for fiber optic cable, 15 times the outside diameter is usually sufficient.
- 4) **Pull Force** Pull force determines how hard the cable can be pulled. Cable with a low pull force can crack or break under the pull strain. Too high a pull force can also deform the cable geometry, causing unpredictable results. Connectors must never be used to pull cables, since the connectors often break. Fiber-optic cables have maximum pull forces as high as 200 to 300 pounds, while Category 5/5E/6 UTP maximum pull forces are in the 25-pound range. Manufacturer specifications should be followed.
- 5) **Termination** Termination applies to all cable ends. Terminations include the punchdown block, the wall plate connector, the ends of the patch cords, and any other ending to a cable run. Unused cable ends must be properly grounded and terminated to reduce accidental shorts and electrical problems. Improper termination causes many LAN and telephone cabling problems. Termination equipment (connectors, patch panels, etc.) must meet the specifications of the type and grade of cable used in the installation. Incorrect mixing of terminations will cause performance degradation and eventual network failure.
- 6) **Termination Installation** Numerous voice, data, and/or video connector jacks are available for cabling installations. End-to-end Category 5/5E/6 connector systems are now available that function in wiring closets, work areas, modular furniture, and other office areas. Wire termination units are color-coded to reduce installation errors. Wall plates are designed to hold multiple (one to eight) voice and data connectors. All connectors in a cabling installation must be clearly labeled.
- 7) **Caution** LANs and modems often use standard RJ-14 modular connectors that look similar to those used for telephones. Attaching a telephone to a computer line or a computer to a telephone line can cause serious damage to the device.

c) **Wire Management**

Few tasks are so daunting as identifying the thousands of unlabelled wires hidden in a ceiling. When adding cable, cabling contractors often spend the majority of their time simply identifying the existing cables. Cabling installers must be certain that every cable has labels conforming to TIA/EIA standards. The few minutes spent planning and marking additions or moves can save many hours of sorting out the cabling scheme later.

d) **Contractor Qualifications**

- 1) **The contractor selected for this Project must be certified by the manufacturer of the products, adhere to the engineering, installation and testing procedures and utilize the authorized manufacturer components and distribution channels in provisioning this Project.**
- 2) **The contractor shall be experienced in all aspects of this work and shall be required to demonstrate direct experience on recent systems of similar type and size.**
- 3) **The contractor shall own and maintain tools and equipment necessary for successful installation and testing of optical and Category 5E and Category 6 metallic premise distribution systems and have personnel who are adequately trained in the use of such tools and equipment.**
- 4) **All personnel must be employees of the contractor. No Sub-contracting will be authorized without prior written approval of the State.**

7) **ACCEPTANCE TESTING**

a) **Copper Cable Testing**

Testing of all copper wiring shall be performed prior to system cutover. 100 percent of the horizontal and riser wiring pairs shall be tested for opens, shorts, polarity reversals, transposition and presence of AC voltage. Voice and data horizontal wiring pairs shall be tested from the information outlet to the TC. The Category 3 cable runs shall be tested for conformance to the specifications of TIA/EIA 568A Category 3. The Category 6 cable runs shall be tested for conformance to the specifications of TIA/EIA 568A Category 6. Testing is done with a TIA/EIA TSB-67 UL Certified Level 2 test set. Tests include length, mutual capacitance, characteristic impedance, attenuation, and near-end and far end crosstalk.

b) **Optical Fiber Cable Testing**

All fiber testing shall be performed on all fibers in the completed end to end system. Testing will be done with a bi-directional end to end OTDR trace performed per TIA/EIA 455-61 or a bi-directional end to end power meter test performed per TIA/EIA 455-53A. The system loss measurements will be recorded at 850 and 1310 nanometers for Multi-Mode fibers and 1310 and 1550 for single mode fibers.

c) **Preinstallation Cable Testing**

All LightGuide cable is tested prior to the installation of the cable. The Contractor assumes all liability for the replacement of the cable should it be found defective at a later date.

d) **Loss Budget**

Fiber links shall have a maximum loss of: (allowable cable loss per km)(km of fiber in link) + (.4dB)(number of connectors) = maximum allowable loss a mated connector to connector interface is defined as a single connector loss numbers for the installed link shall be calculated by taking the sum of the bi-directional measurements and dividing that sum by two.

e) **Manufacturer Warranty**

The Contractor, backed by the manufacturer, shall provide a minimum (20) year Extended Product Warranty and System Assurance Warranty for this cabling system. This warranty shall include the end-to-end channel. Test Equipment The use of unshielded twisted pair cable for communications makes the use of sophisticated test equipment a necessity. All copper cable will be tested for breaks, open or crossed pairs, run length, and near-end crosstalk (NEXT). Typical Category 5/5E/6 cable testers test: NEXT to 100MHz, attenuation to 100MHz, cable length, DC loop resistance, average noise, transient noise, LAN traffic, and mutual capacitance. Sophisticated test equipment is also a requirement for fiber-optic cable. An Optical Time Domain Reflectometer (OTDR) identifies irregularities, breaks, and other discontinuities in fiber-optic cable. Power Meters measure end-to-end attenuation, splice and connector loss, light intensity, and continuity. The basic tools for troubleshooting fiber-optic cable include an optical power meter, light source, inspection microscope, and OTDR. Testing for coaxial cable includes length, impedance, and attenuation.

8) **CONDUIT**

- a) **Entrance Facilities (EF)** Entrance Facilities for the Telephone Company must be provided. This will consist of a minimum of two (2) 4 inch conduits extending from the main cross connect (telephone) room to the property line. The State is responsible for any infrastructure, aerial or underground, to the property line, not including cable.

***The Telephone Company has the legal right to choose the location of the conduits at the property line.***

- b) **Campus Conduit** In a Campus environment consisting of two or more buildings, conduit is required between the **MC** and each **IC**. It is also recommended that conduit be installed for riser cable between the **MC** and each **IC** in a single building application. At least one conduit, minimum 3" with multiple innerducts, should be installed from the **MC** to each **IC**. It should penetrate the wall into each space, per applicable building codes, with a bushing installed on either end to protect the cable. Road crossings or areas subject to heavy loading must be schedule 40 PVC conduit encased in concrete, schedule 80 PVC conduit, or rigid steel conduit. Conduits must have no more than two (2) 90° bends, or a total of 180°, in any single conduit run. All bends must be at least 36" radius bends. If more bends are required, pull boxes or manholes (to be determined by the application) must be installed. Conduit length between closets, manholes, hand holes, etc., must not exceed 600' to 800', as determined by the application and number of bends in the conduit run. Conduit fill must conform to specifications as listed in the National Electrical Code.

Number of Cables	Maximum Percent Conduit Fill
1	53
2	31
3 or more	40

- c) **Work Area Conduit** Conduit installed for workstation cables must be a minimum of ¾". Outlet boxes should be 4" x 4" with a 2" x 4" plaster ring fed by one (1) ¾" conduit.

Workstations in a back-to-back configuration may be served with a single ¾" conduit with two (2) outlet boxes (4" x 4" with a 2" x 4" plaster ring) connected with a conduit nipple of 6" or less.

9) **TELECOMMUNICATIONS OUTLET**

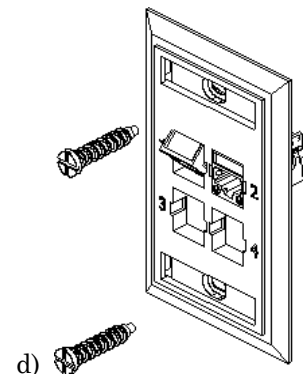
A typical Telecommunications outlet consists of a quad (four (4) hole) faceplate, configured for up to 4, jacks, or couplers. The standard configuration of each outlet has one, 4 pair, non-keyed, non-color coded (Ivory), Category 3 voice jack, and one, 4 pair, keyed, color coded (Orange), Category 5/5E/6, data jack. Optionally, it can be equipped with an, 'F' type connector, a fiber optic connector,

and/or a video coupler. Each jack is also clearly labeled to distinguish it from other jacks. The type of mounting, surface, furniture, or flush, will be determined by the application. A typical faceplate configuration is shown in figure B.

#### 10) PROTECTION and GROUNDING

All equipment racks, wireways, and cable must be grounded and protected in compliance with National Electrical Code (NEC) Article 800, Article 250, National Fire Protection Association (NFPA) 780, TIA/EIA 607, and IEEE 1100 specifications as applicable to telecommunications installations.

A multi-point ground system attached, at a minimum, to the structural building steel (connected via exothermic welding, or electrical equivalent), the power company ground, and water pipe ground (**ONLY IF IT CAN BE DETERMINED THAT METALLIC PIPE IS USED**). NFPA 780 also requires that a communications ground must be bonded to the lightning protection system grounding within 12 feet of the base of the building. Attachments to the building structure should be made on each floor where a telephone closet is required. Used for grounding of telecommunications cable and sensitive computer equipment where differences in ground potential are not acceptable, a single connection at one point and extending through the building is not acceptable. The ground wire size will be determined by the application, but a minimum 6 AWG wire is used.



#### 11) CODES

Installations must conform to all National and Local fire and electrical codes. It is the responsibility of the contractor to insure conformance. Telecommunications will perform inspection of installations to insure conformance.

#### 12) DISASTER PLAN

The possibility of a cabling disaster is usually not considered until a disaster occurs. However, because cabling involves an investment in a huge physical apparatus that can fail in any of a thousand different ways, every cabling project must include some backup procedures to avoid dependence on any single part of the plan.

**Every** organization should have a written disaster plan that addresses topics including alternate sites, personnel required to handle the disaster and cleanup, information records, and a detailed plan for recovery. The plan should be tested before the cabling is completed to ensure that the organization will not depend on any single critical element and that the recovery plan will provide adequate short-term capabilities.

## D. DESIGN AND CONSTRUCTION CHECKLIST

Though each project is unique and has its own set of requirements that must be addressed, the following is a general checklist of design and construction activities. **It is essential that Telecommunications be included in the design process.**

### 1) DESIGN CHECKLIST

#### a) **ENTRANCE FACILITIES**

Provide entrance facilities for the Telephone Company. Primarily required for new construction, this will consist of a **minimum** of two (2) 4 inch conduits extending from the main cross connect (telephone) room to the property line. Conduit outside the building must be either rigid steel or PVC encased in concrete (where required). The State is responsible for any infrastructure, aerial or underground, to the property line, not including cable. **The Telephone Company has the legal right to choose the location of the conduits at the property line.**

#### b) **MAIN CROSSCONNECT ROOM**

Provide a main cross connect room (main telephone room) per the specifications in the State of Tennessee Wiring Standards.

#### c) **INTERMEDIATE CROSSCONNECT ROOMS/CLOSETS**

Provide main intermediate cross connect (distribution) rooms/closets as required by the occupants of the building, per the specifications in the State of Tennessee Wiring Standards.

#### d) **MULTI-POINT GROUND**

Provide a multi-point grounding system, conforming to TIA/EIA 607, attached, to the structural building steel (connected via exothermic welding or electrical equivalent), the power company ground, and earth ground where possible. Attachments to the building structure should be made on each floor where a telephone closet is required. Used for grounding of telecommunications cable and sensitive computer equipment where differences in ground potential are not acceptable, a single connection at one point and extending through the building is not acceptable; it should be connected on each floor. The ground wire size will be determined by the application, but a minimum 6 AWG wire is used.

#### e) **RISER SLEEVES AND/OR CONDUITS**

Provide riser sleeves and/or conduits, with plastic bushings, for backbone (riser) cabling and sleeves above the dropped ceiling for horizontal (Work Area) wiring as required per the specifications in the State of Tennessee Wiring Standards. Conduits must have no more than two (2) 90° bends or a total of 180° in any single conduit run. A minimum of two 4" sleeves per room/closet should be provided.

#### f) **UNDERGROUND CONDUIT**

For a campus arrangement, conduit should be installed to connect all buildings. Although the type of conduit installed will be determined by the terrain, generally, PVC conduit with a sand or gravel cover is sufficient. Road crossings or areas subject to heavy loading must be schedule 40 PVC conduit encased in concrete, schedule 80 PVC conduit, or rigid steel conduit. Conduits must have no more than two (2) 90° bends or a total of 180° in any single conduit run. If more bends are required, pull boxes and/or manholes (to be determined by the application) must be installed. A minimum of two 4" conduits per conduit run should be provided.

#### g) **CABLE TRAYS/WIREWAYS**

Some installations require cable tray and/or enclosed wireways. Wireway installations should conform to all applicable standards and codes.

## 2) **CONSTRUCTION CHECKLIST**

Telecommunications will provide a task list to be included in the project scheduling.

### a) **COMMUNICATIONS ROOMS / CLOSETS**

Telephone rooms and closets must be completed early in the project. For example, in the renovation of a 12 story building with occupant loading scheduled to begin with the 12<sup>th</sup> floor and work down, the telephone rooms and riser sleeves/conduits must be completed and the plywood installed on the walls to allow cable and associated hardware to be installed to serve the upper floors first. Temporary lighting and power is required (for work lights and power tools) until permanent power can be completed.

### b) **MULTI-POINT GROUND**

Install a multi-point ground system as the communications rooms/closets are constructed.

### c) **FLOOR PENETRATIONS AND/OR CONDUITS**

Entrance conduits, riser floor penetrations and/or conduits, and campus distribution conduits must be installed early in the project to allow backbone cabling to be installed to serve the first occupants.

### d) **UNDERGROUND CONDUIT**

For a campus arrangement, conduit should be installed early in the project to allow distribution cables to be installed.

### e) **WORK AREA CABLING**

Work Area cabling must be installed above the ceiling before the ceiling grid is installed and should be scheduled accordingly. In open landscape areas, Work Area cabling is pulled into place and coiled above the ceiling and when the modular furniture is in place with power poles installed, the Work Area wiring will then be completed.

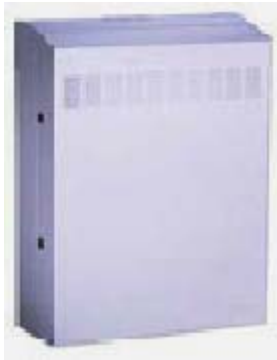
## **GLOSSARY**

<b>ANSI</b> .....	American National Standards Institute
<b>ATM</b> .....	Asynchronous Transfer Mode
<b>AWG</b> .....	American Wire Gauge
<b>BACKBONE CABLING</b> ....	Backbone Cabling (Also called Riser and/or Feeder cable)
<b>BICSI</b> .....	Building Industry Consulting Service International
<b>CATV</b> .....	Community Antenna Television
<b>CCTV</b> .....	Closed Circuit Television
<b>CDDI</b> .....	Copper Distributed Data Interface
<b>COPDM</b> .....	BICSI Customer-Owned Outside Plant Manual
<b>DEMARC</b> .....	LEC Demarcation Point
<b>EF</b> .....	Entrance Facility
<b>EIA</b> .....	Electronic Industries Association
<b>EMI</b> .....	Electromagnetic Interference
<b>FCC</b> .....	Federal Communications Commission
<b>FDDI</b> .....	Fiber Distributed Data Interface
<b>IC</b> .....	Intermediate Cross Connect (Sometimes Called IDF or Closet)
<b>IDF</b> .....	Intermediate Distribution Frame (Sometimes called Wire Closet)
<b>IEEE</b> .....	Institute of Electrical and Electronics Engineers
<b>ISDN</b> .....	Integrated Services Digital Network
<b>ISO</b> .....	International Standards Organization
<b>LAN</b> .....	Local Area Network
<b>LEC</b> .....	Local Exchange Carrier (Telephone Company)
<b>MC</b> .....	Main Cross Connect (Commonly called MDF)
<b>MAU</b> .....	Media Access Unit or Multi-Station Access Unit
<b>MDF</b> .....	Main Distribution Frame
<b>NEC</b> .....	National Electrical Code
<b>NEMA</b> .....	National Electrical Manufacturers Association
<b>NEXT</b> .....	Near End Cross Talk
<b>NFPA</b> .....	National Fire Protection Association
<b>OIR</b> .....	Office for Information Resources (State of Tennessee)
<b>OSHA</b> .....	Occupational Safety and Health Act
<b>OSI</b> .....	Open Systems Interconnection
<b>OTDR</b> .....	Optical Time Domain Reflectometer
<b>PIC</b> .....	Plastic Insulated Cable
<b>POTS</b> .....	Plain Old Telephone Service
<b>RFI</b> .....	Radio Frequency Interference
<b>REA</b> .....	Rural Electrification Administration
<b>STP</b> .....	Shielded Twisted Pair
<b>TDDMM</b> .....	Telephone Distribution Methods Manual
<b>TIA</b> .....	Telecommunication Industries Association
<b>TP-PMD</b> .....	Twisted Pair - Physical Medium Dependent
<b>TSB</b> .....	Technical Service Bulletin
<b>UL</b> .....	Underwriters Laboratories
<b>UTP</b> .....	Unshielded Twisted Pair
<b>WORK AREA CABLE</b> .....	Work Area Cable

## **STANDARD NETWORK SECURITY ENCLOSURES**

### **SMALL INSTALLATIONS – 1TO 24**

A wall cabinet with a “T-lock” will be installed in a place selected by the State Cabling Group. Cabinet will be 42” x 24.2” x 14” with capacity for 4 shelves.



### **MEDIUM INSTALLATIONS- 25 TO 48**

A wall cabinet with a “T-lock” will be installed in a place selected by the State Cabling Group. Cabinet will be 24” x 22” x 26” with capacity for 12 shelves.



### **LARGER INSTALLATIONS – 49 +**

A floor cabinet with a “T-lock” will be installed in a place selected by the State Cabling Group. Cabinet will be 84” x 29” x 36” with capacity for 46 shelves.



### **WIRING CLOSET**

Floor racks will be installed to hold all equipment. These racks will be 7’ x 19”. These floor rack can only be used in a locked Wiring Room where access is limited per the State standards previously listed in Section “C” – 1,2,3.



Access to all cabinets will be controlled through the “T-Locking” system. All cabinets will have the same key so access by multiple State departments technicians and vendors is possible. “T’s” will be left with non-consolidated agency locations but not consolidated locations. Updated “T” distribution lists will be maintained by vendor and supplied to the Cable Group to keep security tight. The universal “T” locking system will allow for manufacturer substitutions/upgrades and changes in the states requirements.



---

<b>9</b>	<b>RFP ATTACHMENTS</b>
----------	------------------------

---

- 9.1 Certification of Compliance**
- 9.2 Cost Proposal Format**
- 9.3 Technical Proposal Evaluation Format**
- 9.4 Cost Proposal Evaluation Format**
- 9.5 Proposal Score Summary Matrix**
- 9.6 Sample Evaluation Notice**
- 9.7 Proposal Package Cover Attachment**

**ATTACHMENT 9.1**

**CERTIFICATION OF COMPLIANCE**

**SBC NO. 529/000-06-03**

---

**Proposer Name**

By indication of the authorized signature below, the Proposer does hereby make certification and assurance of the Proposer's compliance with:

- a) the laws of the State of Tennessee;
- b) Title VI of the federal Civil Rights Act of 1964;
- c) Title IX of the federal Education Amendments Act of 1972;
- d) the Equal Employment Opportunity Act and the regulations issued thereunder by the federal government;
- e) the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the federal government;
- f) the condition that the submitted proposal was independently arrived at, without collusion, under penalty of perjury; and,
- g) the condition that no amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Proposer in connection with the Procurement under this RFP.

---

**Proposer Signature**

**Date**

## ATTACHMENT 9.2

### COST PROPOSAL FORMAT

SBC NO. 529/000-06-03

---

Proposer Name

#### NOTICE TO PROPOSER:

The Proposer shall indicate on the provided Cost Proposal Spreadsheet the offered price for providing all services proposed including all services as defined in the *pro forma* contract Scope of Services of the subject RFP. This Cost Proposal must specifically record below the exact cost amount(s) proposed in the appropriate space(s) as required herein. Said Cost Proposed must incorporate all cost for the proposed scope of services for the total contract period.

The Cost Proposal shall detail only the cost proposed as required, and shall not detail any other rates, amounts, or information. It shall not detail any text that could be construed as a qualification of the cost proposed. If the Proposer fails to specify the Cost Proposal as required, the State shall determine the proposal to be nonresponsive and reject it.

The "Projected Annual Usage" amounts contained in *Attachment 9.2 – Cost Proposal Spreadsheet* are for evaluation purposes only and are based on the estimated usage of such items over a one-year period.

The Proposer must sign and date the Cost Proposal.

#### Cost Proposal Instructions/Requirements:

This RFP includes, as a separate instrument, an Excel© spreadsheet document entitled "*RFP Attachment 9.2 – Cost Proposal Spreadsheet*." The Proposer will use this document to record its proposed costs; the costs must be entered directly into this spreadsheet and the spreadsheet submitted to the State in accordance with the following instructions:

1. The Proposer must propose a Unit price, under the "PRICE" column, for each line item listed in Attachment 9.2 Cost Proposal Spreadsheet (pages 1 through 21). All other spreadsheet cells are password protected and cannot be changed. Unit prices must be proposed in standard currency format, with no more than two digits to the right of the decimal point.

#### DO NOT LEAVE ANY PRICE CELLS BLANK.

2. After the Proposer has completed the Cost Proposal by entering all line item costs into the spreadsheet, the Proposer must copy the Excel© file of the completed Cost Proposal Spreadsheet to a 3.5", IBM-formatted diskette.
3. In addition to the diskette copy, the Proposer must also submit a printed paper copy of the Cost Proposal Spreadsheet. This must be an exact copy of the file copied to diskette in the previous step.

4. The Proposer must enter the Proposer's name, sign, and date a copy of this RFP Section 9.2 (pages 65 and 66) where indicated, and shall include a copy of this Section in its separately sealed Cost Proposal with the diskette and printout.
5. The Proposer shall then package the Cost Proposal. The Proposer's separately sealed Cost Proposal must contain the following items:
  - a. Signed and dated Attachment 9.2 Cost Proposal Format pages 65 and 66;
  - b. Excel© file copy of Cost Proposal Spreadsheet on 3.5", IBM-Formatted diskette.
  - c. Paper copy of Cost Proposal Spreadsheet, identical to diskette copy.

The Proposer must be especially careful to assure that the signed and dated Cost Proposal Format pages, diskette, and paper copy are **all included together** in a separately sealed container, in accordance with the Proposal submission requirements in RFP Section 3.6.

6. The State shall use the diskette copy of the Cost Proposal Spreadsheet as the official Cost Proposal; it is the Proposer's sole responsibility to ensure that the diskette and paper copies are identical. The State shall only refer to the paper copy if there is a problem reading the diskette, in which case the paper copy shall have prevalence.

I hereby affirm that the enclosed diskette contains the official copy of my Cost Proposal in response to the RFP **SBC NO. 529/000-06-03**. If the enclosed diskette is unreadable, I authorize the State to devolve to the enclosed paper copy as the official copy. I also affirm that the diskette and paper copies of the Cost Proposal Spreadsheet are identical. The proposed cost and the submitted technical proposal associated with this cost shall remain valid for at least one hundred and eighty (180) days subsequent to the date of the Cost Proposal opening and thereafter in accordance with any resulting contract between the Proposer and the State.

---

**Proposer Signature**

**Date**

**ATTACHMENT 9.3****TECHNICAL PROPOSAL EVALUATION FORMAT****SBC NO. 529/000-06-03**

---

**Proposer Name**

---

**Evaluator****Date**

---

<b>PROPOSAL EVALUATIONS CATEGORY (AND RELATED CRITERIA)</b>	<b>SCORE</b>
<b><u>General Proposer Qualifications and Experience (Maximum Points: 30)</u></b> <ul style="list-style-type: none"><li>- vendor credentials</li><li>- Proposer's background including an organizational history</li><li>- years in Business</li><li>- years AVAYA SYSTIMAX certified</li><li>- how long Proposer has been performing services required by this RFP</li><li>- location of offices; plans for establishing new facilities</li><li>- number of employees, longevity, client base</li><li>- mergers, acquisitions, or sales</li><li>- form of business</li><li>- whether the Proposer or any of the Proposer's employees, agents, independent contractors, or subcontractors have been convicted of, pled guilty to, or pled <i>nolo contendere</i> to any felony</li><li>- pending litigation against the Proposer</li><li>- bankruptcy or insolvency proceedings</li><li>- organizational chart highlighting key personnel assigned to accomplish the work called for in this RFP</li><li>- proposed project team, members, and organizational structure</li><li>- personnel roster and resumes of key people assigned to the proposed project</li><li>- customer references for similar projects representing both the three largest accounts currently serviced by the vendor and three completed projects</li><li>- performance of current contractual relationships with the State of Tennessee or those completed within the previous five year period</li></ul>	
<b><u>Technical Approach (Maximum Points: 35)</u></b> <ul style="list-style-type: none"><li>- vendor's understanding of the requirements of the project, project schedule, and response times</li><li>- how the Proposer will complete the scope of services as required</li><li>- how the Proposer will manage the project and ensure completion of the scope of services as required</li></ul>	

**TOTAL TECHNICAL PROPOSAL SCORE:**

--

**ATTACHMENT 9.4****COST PROPOSAL EVALUATION FORMAT****SBC NO. 529/000-06-03**

---

**Proposer Name**

---

**RFP Coordinator****Date**

---

The “Proposed Cost for Evaluation” shall be calculated BY THE STATE by 1) multiplying the Unit Price for Each Item by the Projected Annual Usage, to derive the Estimated Annual Expenditure; and 2) totaling the Estimated Annual Expenditures for all items to derive the Weighted Total. This Weighted Total shall be the “Proposed Cost for Evaluation.” (See RFP Attachment 9.2 – Cost Proposal Spreadsheet).

The RFP Coordinator shall use the proposed cost for evaluation amount derived from cost proposals and the following formula to calculate the **SCORE** for the subject cost proposal (calculations shall result in numbers rounded to two decimal places).

$$\frac{\text{lowest proposed cost for evaluation}}{\text{proposed cost for evaluation being evaluated}} \times \text{maximum cost points} = \text{SCORE of cost proposal being evaluated}$$

1. Lowest total proposed cost amount from <u>all</u> proposals:	
2. The total proposed cost for <u>this</u> proposal:	
3. The amount calculated by dividing the amount in row #1 by the amount in row #2:	
4. The maximum number of points that shall be awarded for the Cost Proposal category:	35
5. <b>COST PROPOSAL SCORE</b> -- the product calculated by multiplying the amount in row #3 by the number in row #4:	

**ATTACHMENT 9.5**

**PROPOSAL SCORE SUMMARY MATRIX  
SBC NO. 529/000-06-03**

[SIGNATURE]

**RFP Coordinator**

**Date**

	[PROPOSER NAME]	[PROPOSER NAME]	[PROPOSER NAME]
<b>QUALIFICATIONS AND EXPERIENCE</b> Maximum Points: 30			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
<b>AVERAGE SCORE:</b>		<b>AVERAGE SCORE:</b>	<b>AVERAGE SCORE:</b>
<b>TECHNICAL APPROACH</b> Maximum Points: 35			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
[EVALUATOR NAME]			
<b>AVERAGE SCORE:</b>		<b>AVERAGE SCORE:</b>	<b>AVERAGE SCORE:</b>
<b>COST PROPOSAL</b> Maximum Points: 35			
<b>SCORE:</b>		<b>SCORE:</b>	<b>SCORE:</b>
<b>PROPOSAL SCORE (Maximum 100 Points)</b>			
<b>TOTAL SCORE:</b>		<b>TOTAL SCORE:</b>	<b>TOTAL SCORE:</b>

NOTE: Use as many sheets as necessary to summarize scores for all Proposers evaluated.

ATTACHMENT 9.6

SAMPLE EVALUATION NOTICE



STATE OF TENNESSEE  
**DEPARTMENT OF FINANCE AND ADMINISTRATION**  
OFFICE FOR INFORMATION RESOURCES  
312 EIGHTH AVENUE NORTH  
SUITE 1600, WILLIAM R. SNODGRASS TENNESSEE TOWER  
NASHVILLE, TENNESSEE 37243-0288  
(615) 741-3700  
FAX (615) 532-0471

M. D. GOETZ, JR.  
COMMISSIONER

[DATE]

[NAME]  
[COMPANY NAME]  
[STREET ADDRESS]  
[CITY, STATE, ZIP]

Dear [NAME],

Thank you for your proposal in response to **SBC NO. 529/000-06-03**. The State has completed its evaluation of proposals in response to this Request for Proposals, and the subject procurement records are open for public inspection.

[NAME OF APPARENT BEST-EVALUATED PROPOSER] is the apparent best-evaluated Proposer that the State will consider for contract award. This notice is NOT an acceptance of any offer, and the State retains the right to reject any proposal.

In accordance with the subject RFP and State law, this notice shall NOT create rights, interests, or claims of entitlement in the apparent best-evaluated Proposer or any vendor. No vendor shall acquire any such right unless and until a contract is fully signed by all appropriate State officials.

We appreciate your interest in providing services to the State of Tennessee and hope that you will respond to future Requests for Proposals.

Sincerely,

M. D. Goetz, Jr.  
Commissioner, Department of Finance and Administration



ATTACHMENT 9.7

**Tennessee Contractor License Information**  
Proposal Package Cover Attachment

***Any blank spaces may cause Proposal to be unacceptable and rejected.***

*Provide State contractor license number, expiration date, and classifications  
for Proposer as applicable and in accordance with State licensing law.  
Provide all names as used for licensing or other legal transactions.*

**Proposer  
Identification:**

Proposer \_\_\_\_\_

Address \_\_\_\_\_

**Tennessee Contractor License information:**

*Provide complete information if licensed, or  
circle:*

License Number \_\_\_\_\_

(Proposer Unlicensed)

License Classification(s) applicable to Project \_\_\_\_\_

License expiration date \_\_\_\_\_ \$( \_\_\_\_\_ )  
Dollar Limit